Education Library

July 1960

SCHOOL MANAGEMENT

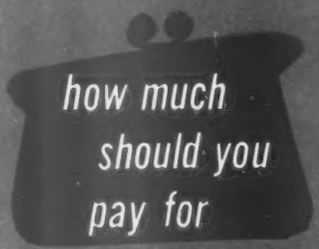
PRACTICAL SOLUTIONS TO SCHOOL MANAGEMENT PROBLEMS

SCHOOL BOARDS AND SUPERINTENDENTS

Why they clash—
and how to avoid conflict

GETTING AWAY FROM THE RECTANGULAR CLASSROOM

How to help your teachers improve ENGLISH INSTRUCTION



how much should you pay for Maintenance & Operation?

SEE COMPLETE CONTENTS ON PAGE 3

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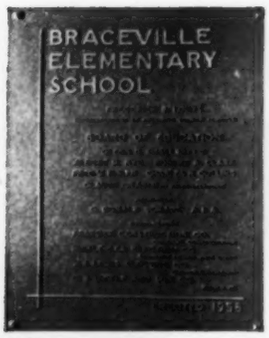

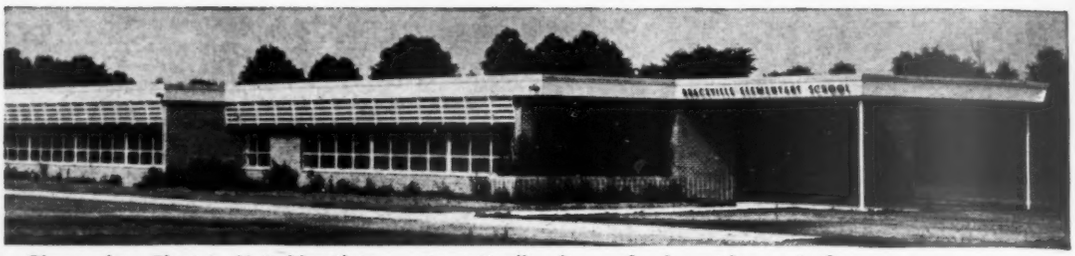

Chromalox Electric Unit Ventilator automatically draws fresh outdoor air for cold weather ventilation or warm weather natural cooling. Convected heat from flanking Chromalox Draft Barrier Heaters breaks up downdrafts from windows.

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Braceville (Ohio) Elementary School: 13,900 sq. ft.
Architect: G. Donald Schade, A.I.A..... *
Power Company: Ohio Edison Company
Consulting Engineers: Meckler Engineering Company
Electric Heating Contractor: W. I. Lewis Electric Company

*Read the Architect's comments . . . See Page 78

CHROMALOX ELECTRIC HEAT
Edwin L. Wiegand Company
7500 Thomas Boulevard • Pittsburgh 8, Pa.

(Circle number 700 for more information)

Vol. 4 No. 7

S | M

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Legislation passed in Rhode Island may set the pattern for government aid to education. Because of its potential importance, it is something your public ought to know.

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Where does school board policy end and administrative function begin? In a tape-recorded interview, two experts tell how to use written policies to end conflicts.

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Here is a way your English teachers can assign plenty of writing even though it means that they must handle the written work of 150—or more—students as a result.

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Key to low-cost improvement of elementary science instruction: your community.

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SCHOOL MANAGEMENT

22 West Putnam Ave., Greenwich, Conn.

Volume 4 Number 7

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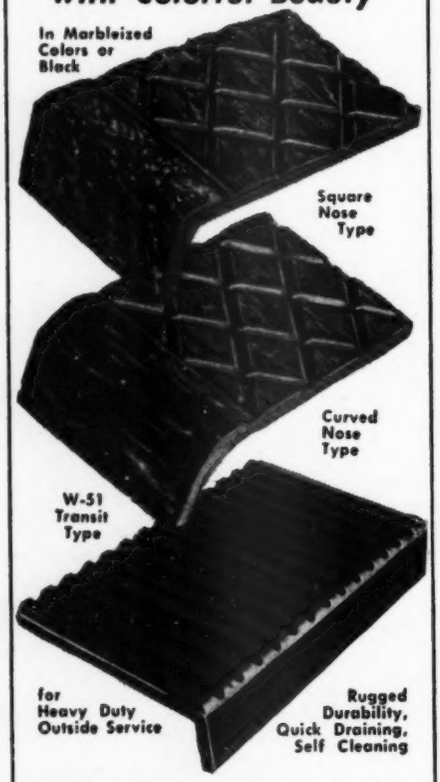
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Fine service

SIR: I think you are doing a fine service in presenting the series on Cost of Education Index. I am following it with interest and making our own comparisons.

R. B. WARREN
SUPERINTENDENT OF SCHOOLS
MUSKEGON, MICH.

Special value

SIR: As you know, I am greatly interested in the problems of federal aid to public education. For this reason, I am sure this information [in Cost of Education Index] will be of special value to me as I continue to give close study to this vital subject.

With every good wish.

RICHARD NIXON
OFFICE OF THE VICE PRESIDENT
WASHINGTON, D. C.

Congratulations

. . . SCHOOL MANAGEMENT is to be congratulated for conducting this much-needed survey.

E. A. WHITEKER
ASSISTANT TO THE DIRECTOR
FOR EDUCATION
DEPARTMENT OF INDUSTRIAL AND
ECONOMIC DEVELOPMENT
STATE OF OHIO

Impressive

SIR: . . . We are tremendously impressed by your sharply-focused analysis of school finances. . . .

EDWIN I. OPPEL
DIRECTOR OF RESEARCH
FANTUS AREA RESEARCH, INC.
NEW YORK-CHICAGO

Most valuable

SIR: Governor David L. Lawrence of Pennsylvania has recently appointed a citizens' committee to study Pennsylvania's educational system and make recommendations for future improvements and changes . . . the Cost of Education Index for American public education . . . should be most valuable to us in our work.

PATRICIA L. ROSENBAUM
COMMITTEE STAFF
GOVERNOR'S COMMITTEE
ON EDUCATION
HARRISBURG, PA.

Variety of solutions

SIR: Once again I want to commend you for the excellence of your magazine.

I am thinking at the moment of your April and May issues. Never in my more than three decades of reading actively most of the journals in the field of administration-supervision do I recall two issues that have presented to readers most of the leading-edge issues in education with imaginative proposals for their solutions. Moreover, this has been done in a manner so as to suggest both evidence and opinion regarding a variety of solutions to the problems. The material is presented in an interesting and readable fashion.

Most of our educational journals have been devoted to descriptions of what is currently being done in schools or reports of class research. You do not ignore this kind of material, but you are also—and this is most important—challenging your readers by bringing to their attention some very thought provoking approaches that are different from those conventionally used. I refer not only to your articles on staff utilization, but also to those on decision making, cost accounting, educational television, and other phases of educational facilities.

Although I must admit a prejudice in favor of your ideas and have a strong personal commitment to the notion that basic changes in education are long overdue, ideas which make your magazine particularly attractive to me, I want you to know how much I appreciate the efforts you are making. I feel certain these thoughts are shared by many others. Keep up the good work.

J. LLOYD TRUMP
ASSOCIATE SECRETARY
NATIONAL ASSOCIATION OF
SECONDARY-SCHOOL PRINCIPALS

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To provide school managements with authoritative information on school lock functions and features, Schlage has prepared the brochure shown here. It is sent without charge or obligation. You will find it most helpful in discussions with your architect and builder.

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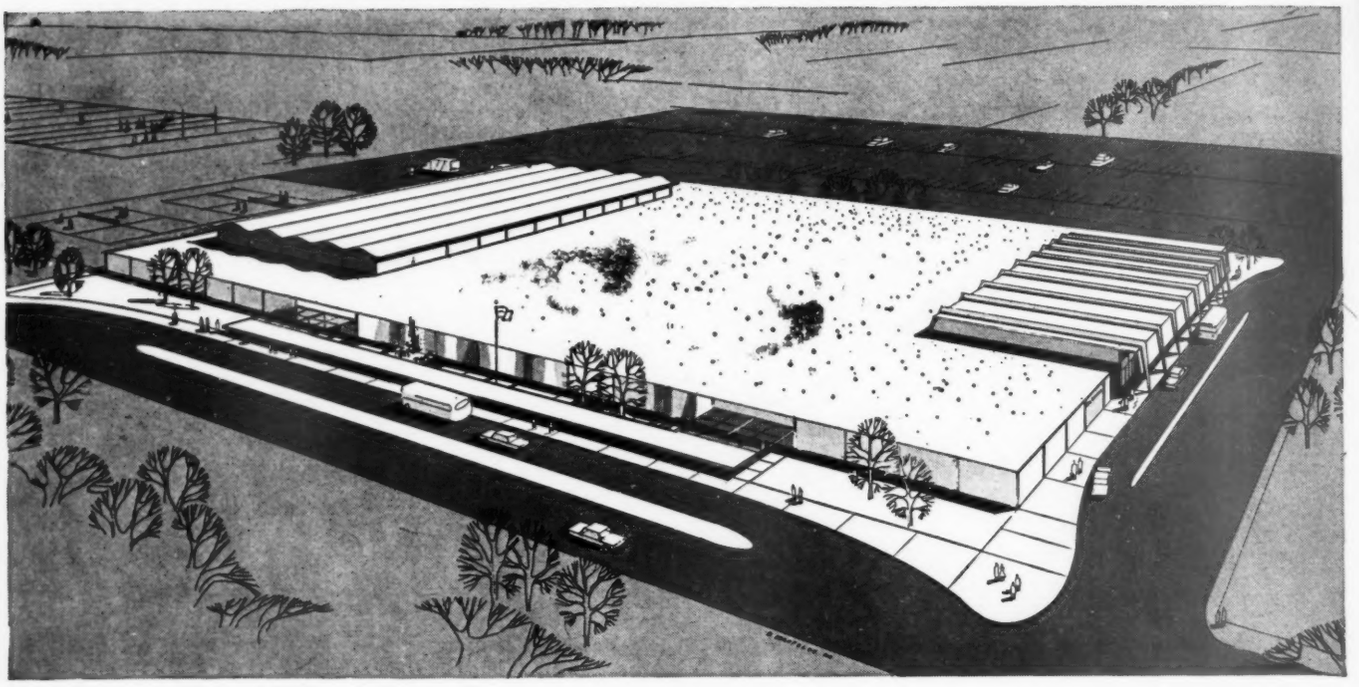

This Secondary School will give you ideas

It's a new kind of school—free from the limitations of natural light, natural ventilation and rigid site orientation because temperature, humidity, light and sound are under constant control—a school that provides flexibility of classroom space, easy conversion of any room to audio-visual activity, maximum administrative control, minimum distances between teaching units, more square feet of classroom wall space for instructional purposes and considerably more working space per site acre.

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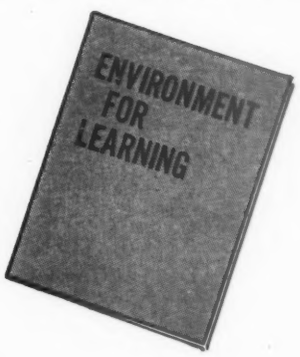
20 pages of stimulating new ideas—perspectives, plot plans, floor plans and detailed cost comparisons—yours without obligation. Carrier Corporation, Carrier Parkway, Syracuse, New York



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YOURS FOR THE ASKING

This material—promotional and otherwise—contains ideas of possible value to you and your schools. Each item listed will be sent to you without cost.

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Fire-retardant paints. How fire-retardant paint works to reduce potential fire damage and how it should be applied is explained in a 12-page illustrated bulletin "Paint Your Way to Fire Safety," published by Albi Manufacturing Co., Inc. An explanation of Underwriters' Laboratories flamespread ratings is also included in the bulletin.

For a free copy of this bulletin, circle number 900 on the Reader Service Card.

Metal window data. Custom-made metal windows, designed for all architectural treatments, are described in a 20-page catalog available from Albro Metal Products Corp. Among the window types covered are reversible, sliding, projected, awning, single and double hung, casement, security and hopper combinations. The windows described are available in aluminum, bronze and stainless steel. Full-and-reduced size sections, installation photographs and discussions of the special features of each window type are given. Specifications are included, too, to enable architects and builders to select windows that will fit their precise needs.

For a free copy of this catalog, circle number 840 on the Reader Service Card.

Music and musical instruments. Four informative brochures, two that supplement educational sound and color films and two that supplement color slide film presentations, are available from the Conn Corp. "The Ear and Music" describes how the ear functions in relation to sound and musical tones. It covers such subjects as: intensity, audibility, low frequency sounds, pitch, complex tones, timbre and formant patterns. A second brochure, "The Tri-C Story," deals with the cause of piston bounce in valve instruments, and how this impairs musical tones. The other two brochures available cover the history, design and manufacture of clarinets in a modern plant and describe, too, full-time laboratories devoted exclusively to the improvement of musical instruments.

For free copies of these brochures, circle number 858 on the Reader Service Card.

Do-it-yourself repairs. School maintenance jobs—such as floor repair, roof renovation, joint sealing and basement waterproofing—that formerly required skilled mechanics can now be performed by persons with no previous experience using simplified instruction data prepared by Stonhard Co. Written by experts in easy-to-understand language, the instructions describe in great detail each step necessary to obtain professional results. Some of the jobs covered include: placing a waterproof floor, setting tile, repairing expansion joints, repairing cracks in concrete walls and floors and repairing steps.

For a free copy of this data, circle number 878 on the Reader Service Card.

Care and repair of pencil sharpeners. An illustrated manual, "How to Service and Repair Your Pencil Sharpener," prepared by Joseph Dixon Crucible Co., diagnoses and catalogs the ills that plague pencil sharpeners to make it easier to keep them running smoothly and efficiently. Easy-to-follow illustrations accompany the servicing directions. In addition, the manual contains an article, "How to Sharpen a Pencil," a sequel to Dixon's little booklet, "How to Erase."

For a free copy of this manual, circle number 849 on the Reader Service Card.

Source book of science aids. This 36-page source book, prepared by Science Materials Center, covers every subject area in science and mathematics curriculums. Included among its special features are description of materials suitable for project funds under Title III of the NDEA. Practical suggestions for integrating these materials into classroom programs and a supplementary reading list for elementary and secondary students covering more than 300 volumes are also included. Emphasis is given throughout the publication to low-cost items that may be used for student experiments in existing classroom facilities.

For a free copy of this source book, circle number 903 on the Reader Service Card.

Outdoor play equipment. Hundreds of different products covering its complete line of park, playground, outdoor, sports and school equipment are featured in a 40-page, illustrated color catalog issued by Game-time Inc. Illustrations, detailed descriptions and specifications are given for a wide range of items including swings, slides, whirlers, climbers, gymnasium and outdoor sports equipment, benches and tables, bicycle racks, flag poles, seesaws and other recreation area equipment. In swings alone, 73 models are listed with nine seat options and almost 500 different possible combinations. The catalog also features several original new "play creations" by the firm.

For a free copy of this catalog, circle number 866 on the Reader Service Card.

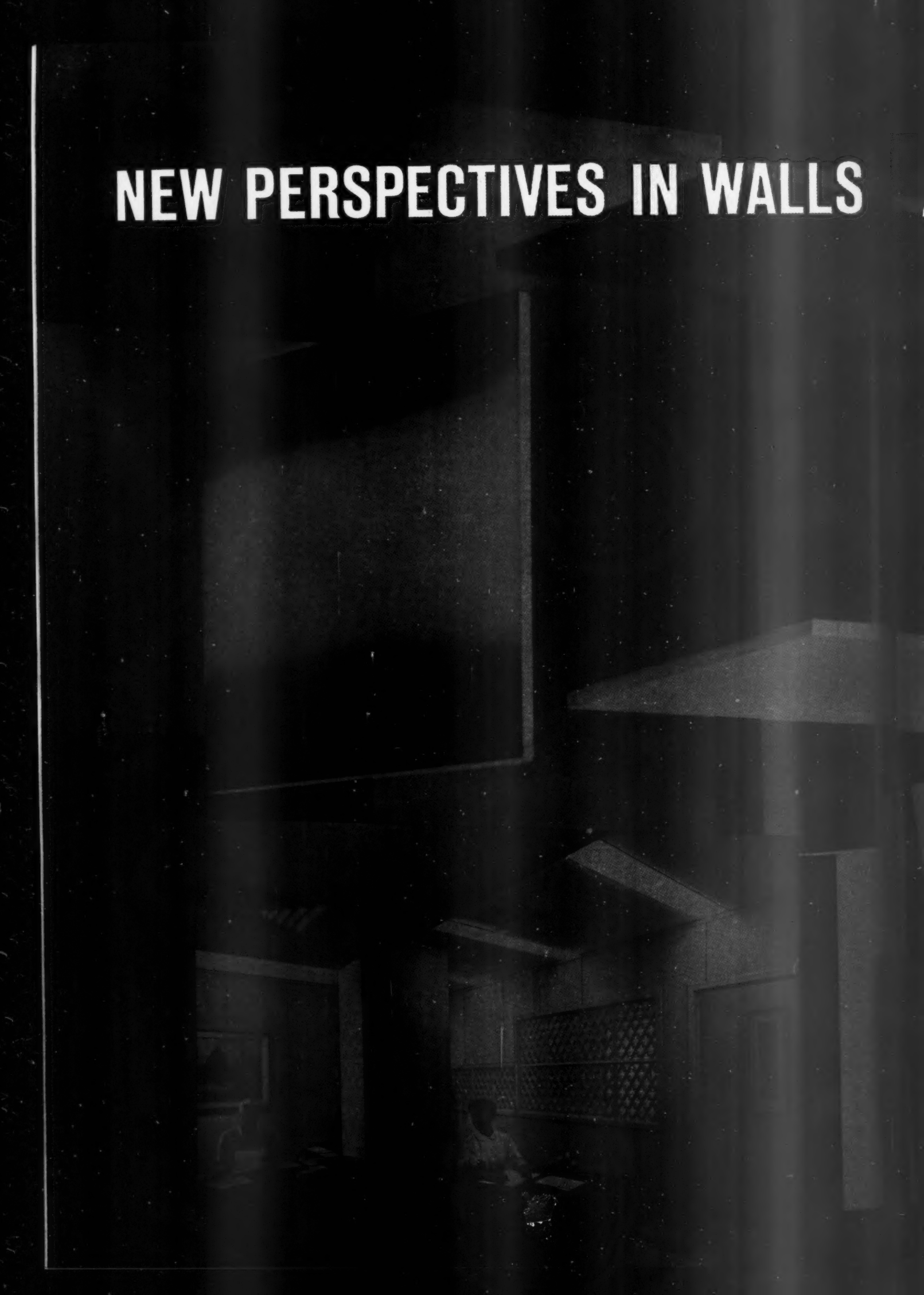
Electric convection heaters. Rugged convection heaters, ideally suited for wall mounting in entrance ways, lobbies, corridors, offices, lavatories and reception rooms, are described in a new bulletin from Edwin L. Wiegand Co. The heaters are available for surface or recessed mounting and with optional built-in thermostat and day-night relay. The bulletin includes sample architectural specifications and a complete listing of all available models.

For a free copy of this bulletin, circle number 856 on the Reader Service Card.

Facts about thermal insulation. Applications and specifications for thermal insulation materials for metal and masonry buildings and industrial equipment are contained in a four-page technical bulletin from Colum-

continued on page 78

NEW PERSPECTIVES IN WALLS



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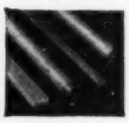

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WHERE TO GET HELP

A guide to useful information

SCHOOL BOARDS

Duties and responsibilities. Board members and school administrators should read this book to better understand the division of duties and responsibilities between a school system's policy-making body and its administrative staff. Chapters are devoted to just about every conceivable aspect of a school board's activities. Appendices include a valuable bibliography, objectives and by-laws of the NSBA, requirements for school board membership, a code of ethics for members, a guide on how to select a superintendent and a discussion of school architecture. This is an authoritative and timely book—one that can be recommended to parents and concerned citizens as well as school officials.

SCHOOL BOARD LEADERSHIP IN AMERICA, *by Edward Mowbray Tuttle. Interstate Printers & Publishers, Inc., 19-27 North Jackson St., Danville, Ill. $4.50. Quantity discounts.*

ADMINISTRATION

Shortage of teachers undiminished. Though an 8.3% increase in the number of college graduates qualified to teach is anticipated this month, America's schools will still lack 135,000 qualified teachers because of rising school enrollments.

According to this NEA survey of current teacher supply and demand, school districts offering the most attractive teaching careers will draw most of their new teachers from among the more able teachers now employed in less favored school districts. Less favored, but still above average districts, will draw more heavily from the new group of inexperienced graduates leaving college this month.

As in recent years, there will be almost twice as many candidates prepared to teach in high schools as in elementary schools. This contributed to the inbalance in the supply since there are eight teaching positions in elementary schools for every five in high schools.

One encouraging feature, however, is that far greater percentages of increases are noted in fields where the shortage of qualified teachers has been most urgent. The increase for science teachers is 26.4%; for foreign language teachers, 21.1%; for mathematics teachers, 31.9%. Above-average increases were also noted in English and commerce.

TEACHER SUPPLY AND DEMAND IN PUBLIC SCHOOLS, 1960. *National Education Assoc., 1201 16th Street, N.W., Washington 6, D.C. $1.*

CURRICULUM

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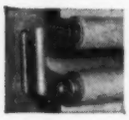

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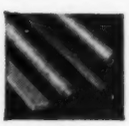

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WHERE TO GET HELP

A guide to useful information

SCHOOL BOARDS

Duties and responsibilities. Board members and school administrators should read this book to better understand the division of duties and responsibilities between a school system's policy-making body and its administrative staff. Chapters are devoted to just about every conceivable aspect of a school board's activities. Appendices include a valuable bibliography, objectives and by-laws of the NSBA, requirements for school board membership, a code of ethics for members, a guide on how to select a superintendent and a discussion of school architecture. This is an authoritative and timely book—one that can be recommended to parents and concerned citizens as well as school officials.

SCHOOL BOARD LEADERSHIP IN AMERICA, *by Edward Mowbray Tuttle. Interstate Printers & Publishers, Inc., 19-27 North Jackson St., Danville, Ill. $4.50. Quantity discounts.*

ADMINISTRATION

Shortage of teachers undiminished. Though an 8.3% increase in the number of college graduates qualified to teach is anticipated this month, America's schools will still lack 135,000 qualified teachers because of rising school enrollments.

According to this NEA survey of current teacher supply and demand, school districts offering the most attractive teaching careers will draw most of their new teachers from among the more able teachers now employed in less favored school districts. Less favored, but still above average districts, will draw more heavily from the new group of inexperienced graduates leaving college this month.

As in recent years, there will be almost twice as many candidates prepared to teach in high schools as in elementary schools. This contributed to the inbalance in the supply since there are eight teaching positions in elementary schools for every five in high schools.

One encouraging feature, however, is that far greater percentages of increases are noted in fields where the shortage of qualified teachers has been most urgent. The increase for science teachers is 26.4%; for foreign language teachers, 21.1%; for mathematics teachers, 31.9%. Above-average increases were also noted in English and commerce.

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THINGS YOUR PUBLIC OUGHT TO KNOW

Basic information that schoolmen can use as part of a community education program

How to get aid to education—with no strings attached

A new piece of legislation passed in Rhode Island may set the pattern for government aid to education in the future. Because of its potential importance to people in all parts of the nation, we believe it is something your public ought to know.

■ ■ ■ When Rhode Island's Republican Governor Christopher Del Sesto signed into law the state's two new education acts this spring, his state became the first in the nation to throw out all complicated formulas and set up a simple method for aiding local school districts.

These acts, passed by the Democratic-controlled legislature, may well set the pattern for state—or even federal—aid to education in the future.

SCHOOL MANAGEMENT editors went to Rhode Island to interview a member of the state department of education—Assistant Commissioner E. Gil Boyer—and individual superintendents to see how the new law works and what it will mean on the local level. Because of its possible implications for the future of education in all parts of the nation, we present this information as something your public ought to know.

The Rhode Island legislature passed two companion pieces of legislation, one designed to provide more state aid for current school programs, the other meant to help cut the costs of building.

Three unique features make this legislation stand out:

1. There are no complicated formulas for estimating the amount of aid a district should get. (Said Governor Del Sesto, in a speech last summer: "We want a law to educate children, not formulas!")

2. There is no top limit to the amount of money the state will give to any single district—but it insists on giving every district a set minimum.

3. The state exercises no control over how the individual districts spend their money.

Under the new current-aid program, the state guarantees to make up at least 25% of every school district's budget. Thus, if a district decides to spend $400 per student the state guarantees that it will support the district in the amount of at least $100 per student.

But that 25% support is only the *minimum* program. The state has mandated that every district must spend a minimum of $300 per student, plus transportation costs, each year. Based upon the real estate values in each district, the state board of education determines the percentage of this amount that each locality can afford to bear.* Districts are then supported from 25% up to more than 50% of their current budget programs.

Take the City of Warwick as an example. The state will pay for 45% of the cost of its educational program. What does this mean in dollars?

Suppose Warwick simply wanted to spend the minimum $300 per student mandated by law. The state would then pick up the tab for $135 per student, (45% of $300). This would be true in almost any state. But now, let's say that Warwick

** Rhode Island's support is based on the idea that every district should tax at exactly the same rate to get $300 per student for the schools. To learn how much support the state must give a district, the number of students in that district is multiplied by $300, plus transportation costs, which is the minimum program. The real estate valuation of property in the district is then multiplied by a set tax rate. The difference between the needs of the minimum program and the amount the district is able to raise at the set tax rate, determines the percentage of aid the state will give the particular district.*

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wanted to spend $500 per student. How much would the state pay? The answer is 45% of $500—a total of $225. And if the voters of Warwick decided to spend $1,000 per student, the state would pay 45% of *that* total, or $450.

This is what makes Rhode Island's plan unique: There is *no limit on how much a district can spend*—and the state guarantees that it will pay the same percentage (never less than 25%) of whatever amount the district decides to appropriate.

How about control? Under the old state laws (all were repealed) aid formulas were determined partially on the basis of how the money was being used. For example, it was advantageous to run a program for gifted students but a program for the retarded was exceedingly expensive. Transporting children gained more state aid than did teaching English or science. This is a form of control.

Under the new state aid pattern, all such considerations have been scrapped. Once the district budget has been set, the state pays a percentage of the total amount appropriated, no matter how it is to be spent.

"All the old aid formulas were scrapped."

"Some people were worried that this might get out of hand," says Assistant Commissioner Boyer. "But we don't expect it to. Remember, the local taxpayers are still the best check against over-spending or waste of money. Sure, the state pays a set percentage of each dollar appropriated, but so do the local taxpayers. And they'll still examine every dollar as carefully as ever.

"What this really does is to allow each district to have as good a program as it wants, at a price it can afford. If Providence wants a $500 per pupil program, its voters must pay for $375 of it. This they can do by taxing themselves at a certain rate. If Warwick wants a $500 per pupil program, its voters must pay $275 of it. This *they* can do by taxing themselves *at exactly the same rate* that Providence uses to raise $375. Thus, any district in our state can afford a program as good as that in any other district with the same local effort. Any district can afford a quality education. That's the law's really strong point."

Aid for building

The companion law enacted by the Rhode Island legislature is designed to aid school building programs on the local level, again without instituting any controls on how the money is to be spent.

Under this program the state shares a certain percentage of the school housing costs of every district. The state will never pay less than 25% and, as with the current aid bill, it may pick up, theoretically, close to 100% of the tab.

Under the Rhode Island law, the districts themselves must pay for debt service. But, lest this become too great a burden, as soon as capital outlay and debt service payments reach the level where $3 of the regular tax rate is being diverted to these items, the state steps in and pays 75¢ on every dollar above that.

"What we're trying to prevent here," says Boyer, "is the situation where you have a beautiful school and can't afford to properly operate it. Your Cost of Education study (*see SM, June, '60*) pointed out that one of every 10 districts in the nation has reached the point where its debt service and capital outlay payments are prohibitive. Many of our districts had reached that point. Now we are going to be able to relieve the pressure."

Other parts of the law

Because these two pieces of companion legislation were really meant to revamp the whole financial set-up of Rhode Island's schools, these other features were written in:

1. A minimum salary schedule for all teachers in the state. The minimum starting salary has been set at $4,000, a figure matched or topped by only six other states.

2. An educational improvement fund to be administered by the state department of education. This fund will be used to encourage experimentation in local districts by making it financially possible for them to try out new ideas, machines and processes. The state will thus provide some of the "risk capital" now available only from private foundations.

3. A provision insuring that the schools—all of which are fiscally dependent—will get the money they need. Under this provision, if any municipality withholds money from the school budget, state funds that would have gone for sewer and other municipal projects will be diverted directly to the school board.

What this means to a district

To find out what all these new laws mean on the local level, SCHOOL MANAGEMENT editors interviewed Dr. Clarence Taylor, superintendent of schools in Warwick, R. I.

Warwick is a basically residential community which has seen tremendous growth over the past decade. Because its citizens are extremely conscious of the needs of education, the district has been able to impose a very high tax rate to keep its schools above the national average.

But in the last few years the squeeze has begun to hurt. Three years ago, for the first time, voters turned down a bond issue. This fall some schools will go on double sessions. In November the voters will be asked again to approve a bond issue to construct a new high school.

Following are excerpts from a tape-recorded interview with Superintendent Taylor, in which he discusses the effect Rhode Island's new laws will have on his district.

Q. Dr. Taylor, you have stated that the tax rate in your district is high. Do you feel that with the new legislation there will be pressure to *lower* school taxes so that money can be diverted to other areas?

TAYLOR: I don't think the citizens here want to decrease their school support. Warwick has gone all out in supporting schools since the end of the war. We have already constructed 12 new elementary schools and a high school. The citizens have spent a lot of money maintaining

View of the modern Ivanhoe Elementary School in Gary, Indiana, showing its walls of Natco Uniwall. The buff colored vertical walls show Uniwall's exterior rugg-tex finish. The light green panels under windows show a unique use of Uniwall's interior face installed in reverse. Architect: Jos. P. Martin & Assoc.

Inside and outside walls of this modern school were built with one unit in one operation

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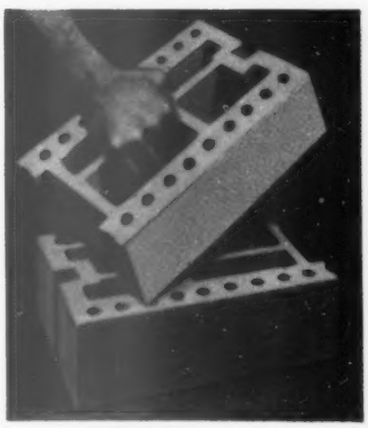

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their schools and keeping them up to snuff. They want to make the schools better than they are, but right now that's not possible without making school taxes exhorbitantly high. With this new legislation, we can improve our schools greatly without raising our taxes.

Q. Then you feel there won't be pressure to simply lower taxes and let the schools stay just as they are?

TAYLOR: A lot of this, I think, depends on the leadership of the superintendent and the school committee. I think it is their job to sell the community. I think Warwick has great pride in its schools and that the community will go on paying the taxes it does now to support education. I don't think there will be pressure to cut back. On the contrary, the citizens will be encouraged to go forward because they can do so now by simply maintaining the local tax rate for school support.

Q. According to the Cost of Education Index, your schools right now are being supported at a higher level than the national average. As a matter of fact, your state law has mandated that districts in Rhode Island exceed the national average. Don't you think, under these circumstances, taxpayers will want you to ease up a little bit?

TAYLOR: Absolutely not. On the contrary, we value your CEI figures because they give us a goal. We don't want to be average and most of us aren't satisfied to stay in your Quality Quarter. We're aiming to reach the Top Tenth. And now we have the means to do it.

Q. Without raising taxes in Warwick, about how much extra will accrue to the schools as a result of this legislation?

TAYLOR: Our income will be 20% higher—about $1 million..

Q. Doesn't that make this an extremely expensive program for the state if it's going to increase every district's income by $1 million?

TAYLOR: It would be very expensive if every district received that much extra. But actually Warwick is the biggest gainer because of our size and tax base. The total extra cost to Rhode Island is $5 million. This is half as much again as state aid used to provide.

Remember, no state aid plan really *saves* taxpayer money. It simply increases the base from which schools will receive funds. Locally, we can tax only real estate. The extra $5 million the state is raising will come from increased gasoline and cigarette taxes.

"About $1 million extra will be available to Warwick's schools."

Q. Just what will this extra million dollars mean to your district?

TAYLOR: We have about 14,000 students, which means that we'll have an extra $70 for each child. We do have some plans, however, that we feel are worthwhile. For example, we have a situation where we hire 90 to 100 new teachers each year.

As a result, we must maintain a strong in-service training program. By and large, we've had to do this in the afternoon, after school hours. We have had to depend upon the good will of our teachers to report to these classes. It is really an imposition on their time and it probably detracts from their preparation for regular classes.

Now, with this extra money, and with the consent of our school committee, we will be able to run our in-service program during the summer time. We'll be able to get together in the morning and work all day without pressure. We'll have the resources to pay our teachers for this work.

In addition we would like to hold regular summer curriculum development sessions. The participants would be paid for their time. One group might study language labs. Others might work on team teaching or using data processing equipment. There is so much that is new and valuable in education today, but in order to keep up-to-date, you

text continues on page 23

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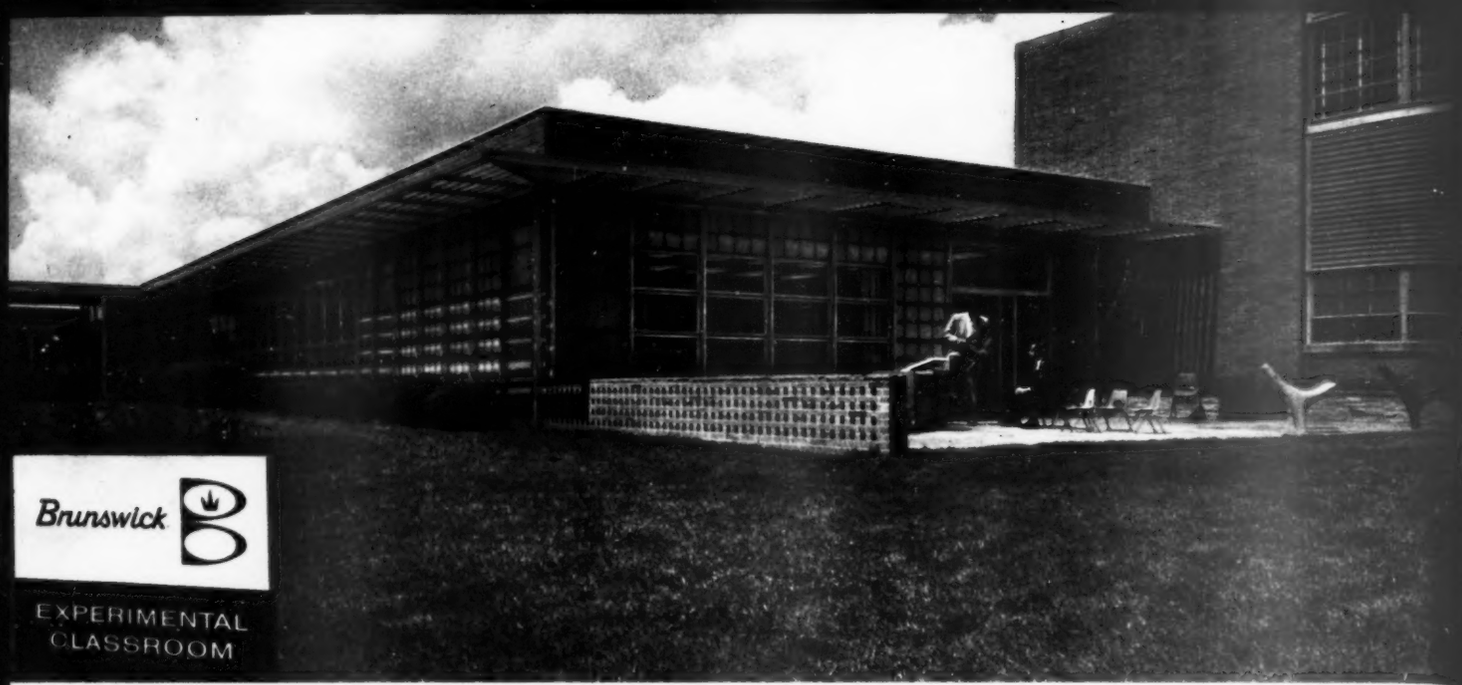

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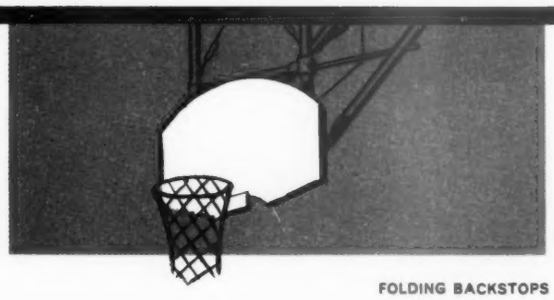

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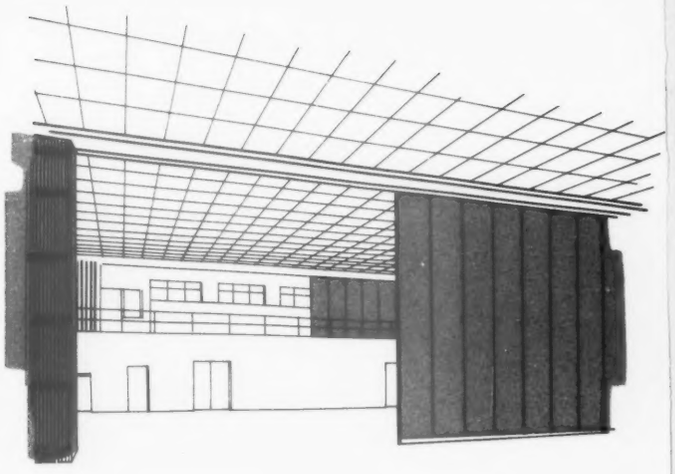

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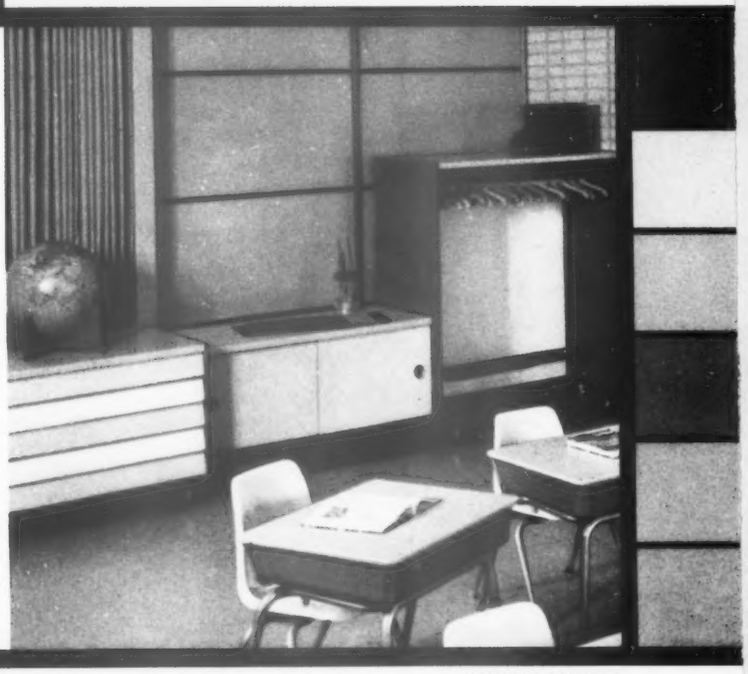

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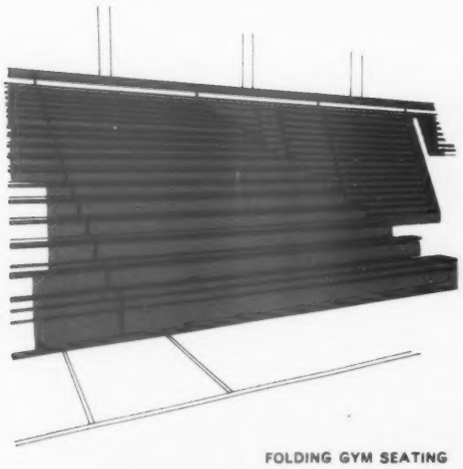

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must have some concentrated time in which to study changing subject matter and teaching methods. With these extra funds, we'll be able to find that time.

Q. Any other examples?

TAYLOR: Offhand, two come to mind. We've been forced the last few years to abandon kindergartens. We had neither the rooms for these students nor the money for teachers. We'd like to reinstitute them. Another area: We'll be able to pay superior teachers for extra work they do all during the year. We'll be able to offer the better teachers a good economic future in the teaching profession, rather than forcing them into administration.

Q. In effect, your kindergarten program is a new one. Isn't there any limitation in this law concerning the types of program you can run?

TAYLOR: None at all. Why should there be? If our voters want to institute a program—and are willing to bear the major part of the expense—the state will do its part.

Q. How will you determine other areas in which you might want to spend more money?

TAYLOR: Part of the answer is going to come from the Cost of Education Index. This is going to help us a great deal in talking to school committees about appropriations in the future. We have had a problem concerning whether or not we were spending too much for supplies and equipment, for instance. Now, with these national and area figures, we can show just what is being done in other districts.

That will be a very important crutch for us. I believe that our people want quality education. They want more than that—they want a top education. Now they know how much they'll need to spend to support it. With the new funds, and the Cost of Education Index as a guide, we'll be able to materially improve our schools.

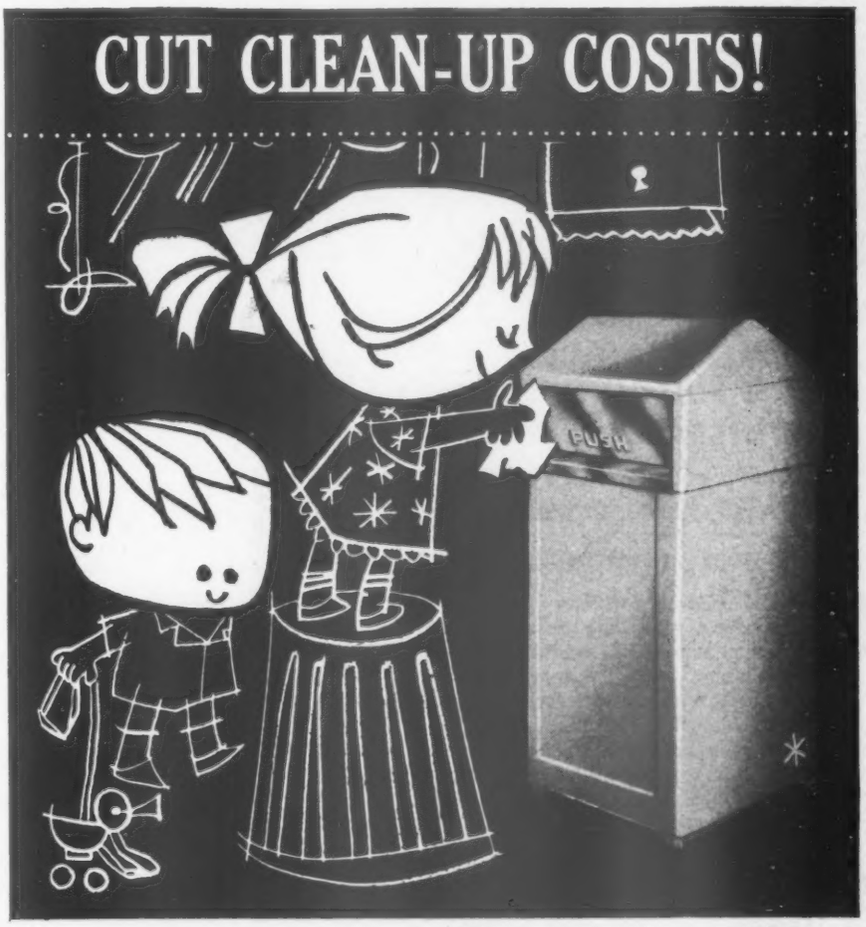
Q. Dr. Taylor, there has been a great deal of talk in the last few years about federal aid to education. One of the main objections is "federal aid means federal control." Do you think that this Rhode Island legislation might set a pattern to get away from this problem?

TAYLOR: This local bill demonstrates to me that there is no state control attached to it at all. I don't think it is the intention of our government or our state department of education, to control our schools. We have absolute local autonomy over how much we are going to spend and how we spend it. I hope that this will set a pattern for any future federal funds which might be made available to improve education throughout the nation.

Q. Could you sell that to your public?

TAYLOR: Yes. Rhode Island has always been quality conscious. The passage of this legislation was a result of a bi-partisan attempt to aid our schools and to bring up the level of our education.

It didn't spring up overnight. Many private and public organizations, under the leadership of our state department of education, took several years to work this thing out and to sell it. I think we now have a program of state aid that gives us complete local autonomy. And I think I could sell that idea to anyone. **End**



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Teachers become eligible for tenure, so board fires them

Twenty-three teachers were summarily fired this spring by the Turkey Run consolidated school system of Parke County, Indiana. The reason: They were about to earn tenure status.

It seems that in Indiana, teachers must be given tenure status during the sixth year they work for a single board. This law does not cover township trustee schools but does apply to consolidated school systems.

Five years ago, Turkey Run switched over to the consolidated system. As a result, all teachers who were with the schools at that time—many of whom had spent their entire careers there—would become eligible for tenure as of next fall.

This, apparently, loomed as a calamity to four of the seven members of the board of education. They voted to summarily issue blanket dismissals to every teacher who had completed five years with the school system. This included 23 of the 47 teachers under contract. Another seven quit in protest over the action.

Sounds to us like a mighty strange way to run a school system.

Sixth graders give world children's Bill of Rights

A children's Bill of Rights, written by sixth grade students in New Haven, Conn., has twice made its way into the Congressional Record and has been proposed for world-wide distribution.

Students at the Roger Sherman elementary school culminated a year-long project by preparing a document that describes how the world should be for young people.

The world's children, the declaration states, are entitled to love "regardless of creed, color, sex, nationality or occupation of parents." The sixth graders proclaimed further that children of the world should have enough to eat and "should have proper clothing according to the climate and weather."

The students acknowledge, too, their good fortune to be in school, demanding that every child have the right to "be taught to read and write. No child should be denied the chance to receive an education."

"In our classroom," the document says, "we are a class family. Three religions and three races are represented. All the children work together, play together and visit each other's homes. We help each other.

"This is the way we would like life to be . . ."

Parents buy art works to cover cement blocks

Something is being done about the cinder-block bareness of the modern school building in Levittown, N. Y., where a group of parents and teachers has raised $50 to purchase reproductions of famous paintings. They will be hung on the walls of the district's East Broadway school.

The dual objectives of the campaign are to counteract the coldness of the walls and at the same time to expose students to the beauty of great art.

"We don't want our kids growing up thinking that cement blocks are beautiful," a spokesman for the group stated. "The new schools are pretty bare and there's not much in the way of beauty. We feel that by exposing the children to some of these paintings we can develop in them a lifelong interest in art—and counteract the cement blocks."

The group was able to purchase 22 reproductions with their resources and is now raising money to get them framed. It hopes soon to be able to put a painting opposite each of the 40 classroom doors in the school—rotating them every six months so that students get a chance to see different types of art.

Among the artists represented in the first group are da Vinci, Picasso, Cezanne, Renoir, van Gogh, Gauguin and

Too good to miss . . .

Good idea . . . A group of students in Hermosa Beach, Calif., had a good idea. They went out and picked wild flower corsages for their teachers. The teachers liked it too—for awhile. Then they put a stop to the practice, asking their students to please stop making such lovely corsages out of poison ivy.

Good topic . . . John Swing, a high school student in LaCrosse, Wis., had a good topic when he addressed the state's Academy of Science, Arts and Letters. Swing told the intellectuals how he turned an old pinball machine into a computer. May we suggest his next project: swords into plowshares.

Good rejoinder . . . They claim it really happened in Covina, Calif. A teacher was soundly berating his class because of a general uproar the students had created. As the teacher's speech approached a crescendo, he reached out for one more crushing cliche. "Why," he exclaimed, "you're acting like a bunch of children!" In the silence that followed the teacher's barrage, one shy, but astute, youngster spoke out in a very soft voice. "But," he reminded the teacher, "we are children!"

Not good enough . . . We like the story from Spencer, Ind., where an irate parent complained to the school board about the grades his 10-year-old son was receiving. The boy, it seems, received an "A" in spelling, but this didn't please his father. "He can't spell," lamented the taxpayer. "I don't think I'm getting the benefit of my tax dollar when it comes right down to it. If I were the boy's teacher," the father concluded, "I would have failed him."

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Goya. An attempt is being made to build a permanent collection showing many different artistic eras and techniques.

"We hope," one parent said, "to introduce the children to a new set of the three R's—Rembrandt, Renoir and Roualt."

Summonses, citations encourage school walkers

In Stanton Heights, Pa., children walk a mile to keep their parents from getting "traffic tickets." It's all part of a plan to encourage students to walk for their health, and to discourage parents from driving them to school.

Last April, nearly every child at the Sunnyside elementary school was getting a ride to and from school. Traffic jams caused by the pick-up cars were monumental. The potential safety problem—with students jumping in and out of cars and racing between them—was becoming too great to ignore.

A committee of PTA members decided to do something about the situation. Reasoning that it would be virtually impossible to get all the parents voluntarily to stop driving, the committee members decided to work through the children.

"We started a walking campaign," explained the safety committee chairman. "The student who walks the most is awarded a citation." The result: In just a few days children were refusing proferred rides from their parents. Spurned mothers drove empty cars to and from the school grounds and finally decided to leave the family chariots at home.

A few parents still do drive to school, but these are being dealt with on a more direct basis. Committee members hand out "summonses" to the offenders which read: "You are hereby summoned to have your child walk to school." Sounds like a good way to end traffic jams at any elementary school.

Graduation eligibility is determined by conduct

In Bakersfield, Calif., high school authorities have instituted a rather interesting pre-requisite for graduation. Under the Bakersfield plan, a student's conduct, both in the school and in the community, becomes a determining factor in his eligibility for graduation.

At the start of each year, students

WHICH OF THESE TOP ARTICLES DID YOU MISS?

Many SCHOOL MANAGEMENT articles—usually the best ones—are reprinted to fill special demand.

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14. How to have a language lab without losing a classroom

If your district wants a language lab but can't afford to sacrifice a classroom, here's the answer to your problem, based on the experience of Bloomfield, N.M.

15. Is driver education a "frill"?

No sane man will say, "Don't train youth to drive." That's not the issue. The big question today is, "Should the schools take on this job, too?"

22. The ungraded primary—has your staff considered it?

Here is how two widely separated school districts—in Oregon and Vermont—have broken the mold which holds primary students of differing abilities in the same class.

26. Milk shake machine adds to lunch program

Here's an inexpensive way to increase the consumption of whole milk at your school.

28. Does your district need a business manager?

When does a district need a business official? What are his duties? How much should he be paid? These are a few of the questions this article seeks to answer.

29. How much does college really cost?

There may be more misinformation about this question than any other educational issue. Here is what every schoolman must know about the cost of going to college.

32. Data processing for smaller districts

Here's how 47 independent school districts in Santa Clara County, Calif., have pooled resources to handle all payrolls and keep up-to-date with a modern data processing center.

33. Teachers need not be clerks

Taking the clerical work out of a teacher's job is an important consideration for any school district. Here's how one has used data processing to do the trick.

34. What do your teachers really think of your schools?

Don't brush off the prima donnas. Too often their complaints are signs of general unrest. Here's a way to get a true picture of teacher attitudes in your district.

35. How to add new life to old buildings

In Wilkinsburg, Pa., no school has been built in 30 years, but students learn in modern facilities. The secret: a planned program of maintenance and rehabilitation.

37. An inexpensive way to handle noontime transportation

Hauling kindergarten children at noon strains most transportation budgets. Here's an idea for cutting costs—within the reach of any district.

38. How safe are your schools?

Here's a three-pronged program for making your schools safer—case histories on fire protection and a checklist for prevention of accidents.

39. Single-story vs. multi-story. Which is cheaper?

There is no pat answer, but there are criteria to be applied. Here's an objective study of the basic factors that determine whether you should build "up" or "out."

46. How Burlington gets a 15% discount by buying out of season

You can put the law of supply and demand to work in your district—and save money. Here's what one district has learned about bucking the seasonal ordering peak.

40. *School Management's Cost of Education Index—I

How do your schools compare to those in the rest of the U.S.? Here, for the first time, is a yardstick you can use to measure your district's financial effort.

41. *School Management's Cost of Education Index—II

In this article, the cost of instruction administration, instructional supplies and clerical help is explored and the importance of balanced expenditures examined.

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are given 100 conduct points. Each time a student misconducts himself at school or in the community, points are subtracted. If the student drops below 70 points in his senior year, he is not eligible for graduation.

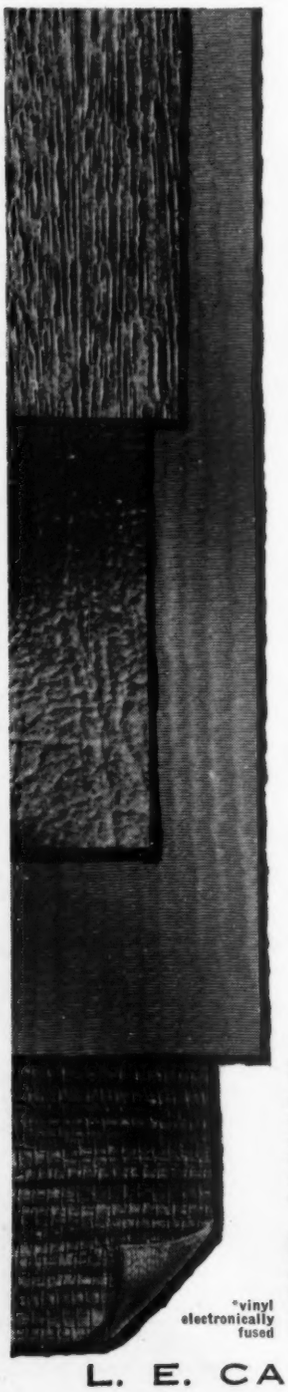
New York State passes private school bus law

A bill requiring all school districts in New York State to provide transportation to all children—whether they attend public, parochial or private schools—has been signed into law by Governor Nelson Rockefeller.

The measure, which takes effect a year from September, puts into law existing policy of the office of the commissioner of education. Up until now the commissioner had always ruled in favor of providing such transportation. Now it will be a mandatory decision.

The bill, in addition, lengthens the distance students may ask to be transported. Under its terms, districts must bus students as much as 10 miles. Previously no school had to provide transportation more than eight miles from the school.

In signing the bill, Rockefeller declared, "existing law requires that children attending non-public schools be afforded transportation on a parity with public school pupils. . . . This bill is in concert with the spirit and carries forward the basic concept of the present law. It formalizes the general practice of the commissioner of education and eliminates the cumbersome requirement whereby parents of children in non-public schools must appear personally before boards of education to request such transportation."



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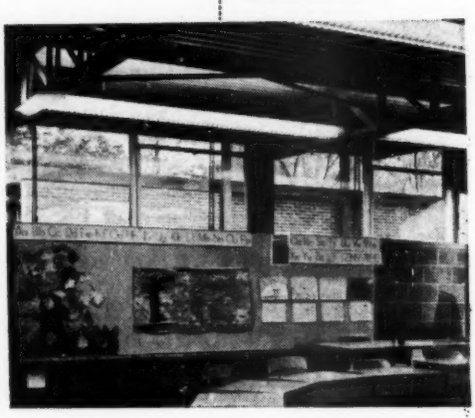

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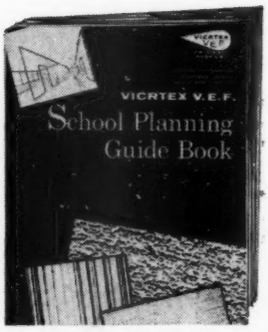

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Poll of teachers shows most prefer small classes to teams

A survey of teachers, conducted by the research division of the National Education Association, shows that the great majority (six to one) think they can teach more effectively in classes limited to 25 or 30 pupils, than they could in classes of 40 to 50, where they would have the assistance of a full-time clerical aide. Elementary school teachers favored small classes by 11 to one.

It is reliably reported that in 1822 a survey of Mississippi River boatmen showed that the great majority (six to one) thought that they could move cargo more effectively in small oar-powered boats than they could in large steam-powered craft, where they would have the assistance of a full-time engine stoker. The first successful steamboat on the Mississippi started its run in 1823.

Textbook expenditures falling down, book publishers say

According to the American Institute of Textbook Publishers, American schools are spending too little for textbooks. The association has estimated that the average school in the United States spends $4.94 per student on books each year.

Students in North Dakota are the luckiest. Their schools spend $6.78 per year for every student on textbooks alone. In Mississippi, the average expenditure per pupil is just $3.38. According to SCHOOL MANAGEMENT's Cost of Education Index, the average school in the nation is spending $11.29 per student on all teaching materials, including books.

Alden H. Clark, president of the publisher's association, pointed out that the new emphasis on different teaching methods and the assignment

of more homework, were actually creating a greater need for textbooks.

"If our elementary and high schools would make available an average of one more book per student," Clark said "this would help relieve the shortage and be the cheapest and quickest way to raise the quality of our education.

"One more book per student would add only about one-tenth of a cent to the public school education dollar."

Junior high pupils can't read, New York City finds

At least one out of four junior high school pupils in New York City is two and a half or more years retarded in reading, a study has found.

The average seventh grader in the city's schools is a year behind in reading and the typical eighth grader is almost as badly off. Only in the ninth grade is the reading rate up to the expected grade level.

The low reading level is blamed, in part, on a former policy in the elementary schools to promote virtually all pupils. That policy has since been changed, even though individual principals have wide latitude in determining whether or not to advance a student.

Although elementary school graduates are supposed to have at least fifth grade reading ability before going into the junior high school, the survey found that 19,208 children in the seventh grade—almost one-third—had less than this.

The findings were based on tests given early this year to 172,632 junior high pupils in the city schools. On the brighter side, the study found that 46,781 pupils, or 27% of the total tested, were a year and a half or more above their grade level in reading.

On the other side of the picture, 48,703 pupils (28%) were two and a half years or more behind, and 13,459 (nearly 8%) were four and a half or more years behind. About 5,000 students, some in the ninth grade, were reading at first and second grade levels.

Driving of students seen as Grade-A peril

High school students who drive other than on weekends are endangering their grades, their future and even their lives.

These are the conclusions of a survey of 20,000 junior and senior students in the United States and Canada. The survey was conducted by the Allstate Insurance Co.

The study confirmed what many educators have felt for a long time—that there is a direct relationship between driving a car and academic standing. "Driving a car does not in itself have an adverse effect on grades," the report concluded, "but when the use of the car is permitted to infringe on school work, serious problems develop."

Grades started to suffer, the survey showed, when the car was used more than two days out of the five-day school week. Those who used the car at least four days were more than twice as likely to be D or worse students than the two-day users. The best records were made by those who confined their usage strictly to the weekends.

The poorest students, the study showed, were those who drive their own cars. Of students spending $6 or more per week on car support, only 1% were able to earn A grades.

The survey also revealed that poor grades do not always come *after* the

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A is for advertising

It must have sounded like a nice idea when the publisher approached elementary school principals and teachers in Ontario, Canada, and offered them a free ABC book, "The Educational ABC's of Industry." But parents began to wonder when students came home singing such jingles as "H is for health, so keep Face-Elle on hand. It's Canada's finest, the Softerized brand."

One couple removed its child from school because "she was spending her time copying slogans." Another declared, "It smacks of brainwashing." The Ontario Department of Education denied any knowledge of the book and declared that advertising is not allowed in the schools. A quick check revealed that the free book had netted the publisher several thousand dollars a page for the privilege of placing alphabetized advertising in it.

The whole incident is apparently over now and students are back to learning their ABC's about such mundane things as apples, boats, and carrots, but here's our own little jingle, free for the taking:

"A is for advertising, B is for brand.
C is for children who buy on D-mand."

use of a car. Often, the use of cars is the result of poor grades and a general disinterest in school work.

Other findings on the car-grade relationship include:

- Good students who yield to the car craze suffer the sharpest drop in grades.
- The longer a car has been owned, the less is the chance of a boy being a good student.
- The greatest damage occurs when the high school junior obtains a car.
- Among students with neither car nor job, there are twice as many A and B students as among students having cars and jobs. Jobs were included in the study because it was found that they often have a direct relationship to car ownership.
- The more evenings a car is used, the more apt are grades to fall.

The insurance company's study concludes by asking parents to keep a close watch on Junior and his car.

Swedish experiment shows television helps retention

School lessons given via television seem to have more lasting effect than lessons given on the radio or directly to a class by a teacher, if one is to believe the results of an experiment carried on in Sweden.

The experiment involved 641 students in the fifth through the seventh grades. The students were divided into three groups: one to be taught exclusively by radio, another by a teacher and the third by television. The areas each group studied were "The story of the St. Lawrence Seaway" and "How is a weather report made?" All lessons were identical.

In a test given immediately after completion of the course, the students who had received instruction directly from a teacher or over the radio, scored higher than those who had been taught by TV. On the average, the best results were achieved by the teacher. The test was based on recall of details.

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H is for happy

Voters in Danbury, Conn., overwhelmingly turned down a proposed $2 million-plus budget recently. As a result, teachers in the town are happy.

This unusual situation came about when the town's finance board carved $120,000 out of the budget submitted by the fiscally-dependent school board.

The finance board had made the cut in order to eliminate any increase in teacher salaries. Teachers led a campaign for the defeat of the budget and won their fight during a well-attended town meeting.

The town's taxpayers adopted a resolution demanding that the finance board submit a new school budget sufficient to cover the educational needs of the town. In Danbury, at least, the taxpayers seem to consider teachers first-class citizens.

same test was given to the same students. In this case, the television group scored substantially above the other two, indicating that these students had been able to retain information over a longer period of time.

Vermont court delays ruling on church-state issue

The Vermont Supreme Court has put off until the fall a ruling on the use of public funds to pay tuition at parochial schools. The issue is eventually expected to go to the U.S. Supreme Court.

The case before the Vermont court is an appeal by the South Burlington school board from a lower court decision holding such use of public funds unconstitutional.

South Burlington, which has no high school, has been sending some of its students to neighboring Burlington high schools on a tuition basis. Other students are sent to two Catholic high schools in the area.

Superior Judge William C. Hill ruled last February that the expenditure of public funds to pay tuition at parochial schools is a violation of both the federal and state constitutions.

The decision of the state's highest court next fall could affect other communities that pay tuition to 11 Catholic high schools and one Episcopal school for girls.

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The handsome School Building Product File is designed to help you with the difficult job of selecting and specifying the materials and equipment that go into a new school.

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If you have a school under construction, the same officials will receive free Files approximately six months before your estimated date of completion.

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Why school boards and

Don't write off all board-administrator friction as "personality conflict"—it may be a symptom of a more basic ill. This report of troubles in Hickman Mills, Mo., identifies the problem and offers a solution.

■ ■ ■ Difference of opinion is common in the management of any school district—in fact, it's healthy. But open conflict is another thing. When sincere, honest criticism between the school board and the administration is replaced by vindictive sniping, something basic has gone wrong.

But what brings on mutual distrust and suspicion in the first place? And what can you do in the management of your own schools to prevent it?

Most schoolmen agree that the answer lies in defining the areas of responsibility for each part of the team that runs the schools. The board should make policy; the superintendent should carry it out. (*See "How to minimize board-superintendent conflict," page 37, in this issue.*) What could be simpler?

Unfortunately, it isn't ever that easy. Unless you draw the line carefully between policy making and administration, one group of school officials may step out and—consciously or not—usurp the functions of another.

A case in point

That's exactly what had happened during the past few years in Consolidated School District Number One, Hickman Mills, Mo. Since 1952, three superintendents had come and gone after clashing with the school board. One of them had even stated that no able administrator would stay in the district, because of the board's constant badgering and interference.

By 1959, the school problem had become so acute that individual citizens—and even the school board itself—had appealed independently to the National Education Association to look into the matter. The NEA Defense Commission appointed a special committee to investigate conditions in the district. It was the committee's task to question staff members and citizens, report back its findings and make any recommendations it thought necessary to clear the air. Here, drawn from the committee's published report, are the facts it uncovered.

Factionalism

Over and over again, the members of the investigating group heard about personality differences between board and administration and individual board members themselves. Decisions of the board were frequently delayed by factionalism. Some of the members comprised a "pro-superintendent" group to oppose those siding with the senior board member on school issues. As a result, most board votes ended in three-three ties so that no immediate action could be taken.

Pushing its study further, the NEA committee discovered that most of the board members were hazy about where their authority ended and the administration's began. Since the senior board member had had experience as a teacher and administrator, they tended to follow his lead on school issues.

Some former board members complained to the committee of "constant harassment" while serving on the board. Others indicated that in tests of strength—re-election, for example—those who had clashed with the senior member were often defeated.

Public relations

The citizens of Hickman Mills were kept informed about school affairs by whatever means individual school officials thought fit:

- One board member circulated a letter giving his personal version of school affairs to over 800 families.
- The senior member was accused of engaging in telephone campaigns in which he expounded his own views to personal friends and residents in the area.
- Most board members made extensive use of the local press to attack each other and the superintendent.
- In addition, minutes of board meetings—containing complete accounts of all that transpired, including discussion, name-calling and interruptions by the public—were indiscriminately circulated to the clergy, the district's faculty and local citizens.

Written policies

From 1952 to 1958, the board had no written policies to guide it in making decisions affecting its schools. During that period 14 citizens' committees were supposedly working on the formulation of policies, though very little was actually accomplished in the way of tangible results. When, in 1958, the board agreed to adopt the policies of the North Central Association of Colleges and Secondary Schools, a dispute arose over the wording of a statement regarding the handling of

superintendents clash

staff personnel. The senior board member objected to the fact that the board would be entitled to act on personnel matters *only* upon the recommendation of the superintendent. Result: the word "only" was finally deleted from the statement. (Last year, the senior member admitted to the NEA investigating committee that he would not have objected to the word if he had trusted the administrator.)

Other disputes

Controversies arose frequently, over the years, between the board and superintendent in a number of areas. One that left resentment among some board members was over the purchase of land for a new high school site. They felt that the superintendent of 1957-1959 was responsible for the failure of the purchase agreement to be carried out.

Another conflict developed in the same period over the appointment of a principal for the new school. The board over-ruled the superintendent's choice and hired instead an alternate candidate of its own choosing.

An additional case of over-ruling: the board ignored the superintendent's disapproval of a high school chemistry teacher and rehired him.

The question of employing relatives of board members in the Hickman Mills schools also aroused considerable heat. In this instance the wife of the senior board member was employed by the local high school and a number of people thought the practice unwise. The senior member, however, complied with state regulations by abstaining from voting when his wife's contract came up for renewal. A motion introduced to prevent such employment of relatives was eventually dropped by the board, but not before strong opinions had been expressed on both sides.

The superintendent employed from 1952-1956 had apparently experienced comparatively smooth sailing—until he was abruptly dismissed by unanimous vote of the board. He had an informal working relationship with the board, with no written policies. In the opinion of the investigating committee, this was directly responsible for the circumstances surrounding his resignation. The committee discovered that the decision of at least two board members to vote for dismissal was based upon rumor—later proved false—concerning the administrator's personal background.

Teachers and citizens

During most of these events, the district's teachers remained passive. The local teachers' association was confused about the role it should play in the situation. Most of its members felt they shouldn't involve themselves in conflicts between the board and the administration, particularly since they received word about what was going on primarily through the local newspapers. In addition, only a small percentage of the teachers had been in the school system for as long as five years. One-third of them were new in the 1958 school year and one-third had been hired the year before.

When interviewed by the investigating committee, however, several teachers objected to the lack of definition of their duties and responsibilities. They had very little information about the standards used to dismiss district employees.

But if the teachers remained quiet during the school troubles in Hickman Mills, local citizens more than made up for their lack of involvement. They attended board meetings by the hundreds in 1959 and even engaged in arguments with members while issues were being discussed. When the superintendent resigned in 1959, they obtained 2,500 signatures on a petition requesting that the board resign *en masse* as well and permit new elections to be held. (The board did not comply.) Two months later, they voiced strong support for the district's school program by voting to increase the tax levy by 65 cents.

Committee findings

Recognizing the intense interest expressed by local citizens in school affairs, the NEA investigators included them in a questionnaire survey conducted after all personal interviews had been completed. At the same time, the investigators surveyed the district's teachers to provide them with the opportunity to speak freely on school conditions.

According to the citizens' responses, Hickman Mills' school troubles were primarily due to personality clashes, with the senior board member drawing the greatest number of votes as the one responsible for such squabbles. In addition they felt that the welfare of the schools could best be served by his resignation. In this the teachers concurred, though by and large they characterized their own relationship with the board as ranging from fair to excellent.

One of the significant conclusions arrived at by the special committee, however, was that the difficulties experienced in Hickman Mills *were not exclusively due to personality clashes. A more important contributing factor, it felt, was the lack of a clear, definite pattern of school board operations.* This confusion in the areas of responsibility and procedure was what made the acknowledged personality conflicts loom so large in the first place. More specifically, the committee found that the school board had failed in several other areas as well:

- It had not maintained decorum at board meetings.
- Its members failed to maintain impersonal, objective attitudes toward school issues.

turn page

- The proceedings of its meetings —including verbal clashes—were reported in too great detail.
- It had not followed proper procedure in forcing the resignation of the 1952-1956 superintendent.
- Finally, it had not taken action about an important divisive factor in the school controversy—the employment of the senior member's wife in the district's high school.

In its findings the committee also criticized the conduct of the superintendents involved in the school disputes. Among other things, they had not insisted upon the maintenance of proper procedures when disputes with the board arose. The 1957-1959 superintendent had ignored the need for an effective public relations program and had failed to set up effective staff relationships.

Nor were the district's teachers and the citizens of Hickman Mills found to be blameless. The committee felt that the teachers had turned their backs upon a serious professional matter by not concerning themselves with the impairment of the educational program in their schools. And, of course, the local citizens were at fault for contributing to the already poor conditions that existed in the district—first, by not trying to encourage cooperation between split board members—and second, by conducting themselves improperly at board meetings. The citizens were also found guilty of overlooking the fact that board members were their duly elected representatives, empowered to conduct school business.

What was done

In an attempt to clear the air, the investigating committee made a series of recommendations. The most important among them: the establishment of clear lines of responsibility for those empowered to run the schools. The board, it declared, should in the future consider itself strictly a policy-making unit and leave the implementation of its policies to the district's chief administrative officer, the superintendent of schools. It suggested, too, that a handbook of policies be developed by the board to help it carry out its functions as the legislative branch of school government. (In the summer of 1959, following the investigation but before the report had been published, the board completed a set of written policies for the district.) The committee's final recommendation to the board—among several others—was that it look for, and accept, the resignation of the senior member. This was designed to eliminate some of the personality differences that had interfered with the smooth functioning of the board on school issues. (The senior board member submitted his resignation within a month after the committee's report was made public in February, 1960.)

The committee's suggestions for improvement were not aimed exclusively at the board, however. Among other things, it recommended that the superintendent develop a handbook of administrative regulations to supplement the board's manual of policies. It was also suggested that he institute a broad public relations program and assume full responsibility for his own actions, resisting every effort of the board to take over any of his administrative functions.

Teachers were asked to make their professional weight felt more strongly in school affairs in the future and citizens were requested to refrain from indulging in petty politics at the expense of the educational program.

Taken together, the NEA's comprehensive study points up one significant fact. In Hickman Mills, as in most school districts everywhere, "personalities" alone are not the major factor responsible for clashes among those who manage the schools. They reflect, instead, the lack of clearly defined functions and responsibilities. One sure way to help each member of the school team know the role he is meant to play in his district is through the development of written policies. By setting limits to actions and prerogatives, they help minimize personality clashes and permit the improvement of the educational program. **End**

. . . and here's School

Mrs. Helen Radke
Port Angeles, Wash.

Edward Epstein
Park Forest, Ill.

how to minimize

board-superintendent conflict

Where does school board policy end? When should the administration begin to exert its executive function? A joint NEA-NSBA study has produced a valuable set of answers in its just published manual on written school policies. Here are first-person details about this important report from two of the people who helped to write it.

■ ■ ■ In Hickman Mills, Mo., a mortal struggle between the school board and the administration came close to wrecking the district's schools (*for details, see preceding story*). The conflict, in all probability, was inevitable. But the proportions of the fight could readily have been contained if district officials had ever taken the time to *put into writing* the duties and responsibilities of the board and the administration.

In a city as big as Indianapolis, a similar battle resulted in the resignation of the superintendent under peremptory and embarrassing conditions.

These two cases are not exceptional. They are the visible portion of a struggle that exists—sometimes openly, sometimes *sub rosa*—in school districts all over the nation. One need look no farther than the "life expectancy" of a superintendent as reported by Richard Barnes Kennan, secretary of the NEA Defense Commission (*SM, June '59, page 37*): The average superintendent spends fewer than four years in his job before he is dismissed, quits, or elects to leave.

The new power structure

In the last decade, growing enrollments and mounting taxes have produced a dynamic layman interest in school management. The interest is healthy, but the results have not always been so. School boards—sometimes of necessity, but often out of malice—have focused their efforts on educational areas that formerly were the exclusive province of the professional educator. This has caused conflicts that only once in a while come to the surface.

The conflict continues, but there is growing evidence of a new awareness by both parties that there is a middle ground and a middle way to resolve the power structure. The professionals are not unaware of important gains made in better pay, and more ambitious aims for our schools, as a result of active lay interest. And laymen, through their elected representatives, have come to learn the appalling problems involved in running the schools.

Team operation of the schools, consistent with the American concept of checks and balances, is growing as a national pattern. Tangible proof may be found in an important effort by the National Education Association and the National School Boards Association to hammer out a joint report on the subject of written school policies. In 1957, each of the groups appointed five persons "to explore areas of overlapping and mutual interest." The joint committee agreed, at an early stage, that school personnel policy was one area that rated priority treatment.

As the study of this subject progressed, it became evident that personnel problems and policies could not be isolated from *over-all* educational policy. At this point, the group plunged into a sharply pointed program of developing a *modus operandi* for the local district to use in codifying its general school policies. The Illinois Association of Classroom Teachers and the Illinois School Boards Association were asked to work with the national group in an effort to keep the project at a practical, working level.

How well they succeeded is apparent in the recently published manual "How to Develop Written Policies" (*see box, page 38*).

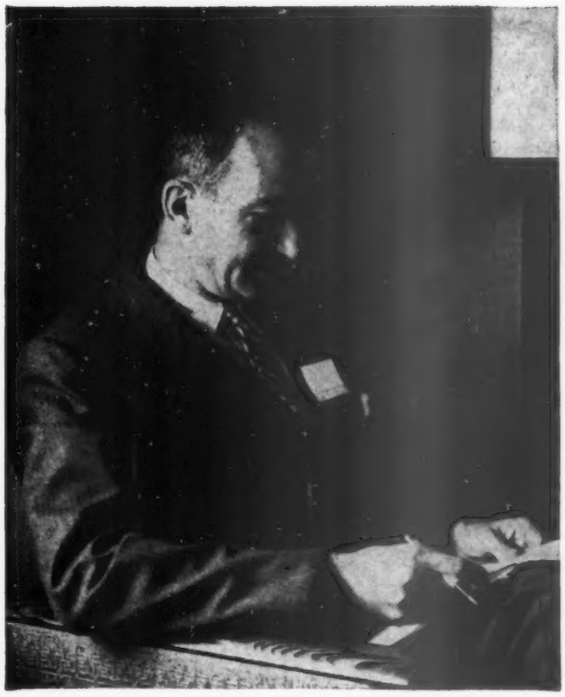
Behind the scenes

In the following tape-recorded interview, SCHOOL MANAGEMENT's editors report the comments of two people who participated in the study program. Mrs. Helen Radke, for 12 years a school board member from Port Angeles, Wash., was the principal architect of the joint committee report. Mr. Edward Epstein, a board member from Crete-Monee School District, Park Forest, Ill., participated in the Illinois sub-group that worked with the NSBA-NEA committee during the last year of the research.

"HOW TO DEVELOP WRITTEN POLICIES"—A GUIDE TO PROCEDURES

Few committees, even after long and conscientious effort, produce a document of thoroughly practical value. Too often the wheat is buried in the chaff of the compromise. Not so in this remarkable manual. If you want to put your district's policies in writing—or if you want to revise an outdated manual—this document will provide a useful blueprint and guide.

The manual, a handsome looseleaf book containing hundreds of pages of excerpts from written policies of districts throughout the country, sells for $35—and would be a bargain at many times the price. Copies may be purchased by writing to Dr. Harold Webb, Associate Executive Director, National School Boards Association, 1940 Sheridan Rd., Evanston, Ill.



"The real reason for writing policies is to save time and trouble."
EPSTEIN

Q Mrs. Radke, it has been said that the main purpose of written school board policies is to define, once and for all, a clear line of authority between the school board and the administration. Would you agree?

RADKE: Yes, that is certainly one of the main purposes, and one of the happy results of written policies.

Q. Are the results always "happy"? For example, might not board members want written policies in order to put the superintendent where they think he belongs? Or might not the superintendent urge written policies because he hopes to get the school board out of his hair?

RADKE: There's nothing wrong with either of your statements, except that you question their motives. Boards get into difficulties when they try to get into the field of administration. And, superintendents, occasionally, stray into the field of policy making. Written policies, which clearly define the area of each, provide an excellent way for a superintendent and a board to work together.

Q. Who is more hampered by written policy—the board or the administration?

RADKE: I'm not sure I can answer that. I'm not sure that it hampers either one. Defining the working relationship should not hamper—it should give greater freedom to each. Perhaps the board members are helped more. After all, superintendents have a professional background. They spend their lives in the field of education. School board members come to their positions from all sorts of backgrounds. When they first assume the job, there are many areas which are completely unfamiliar. Written policies give immediate help in acquainting them with the school system, its organization, its relationships, its procedures and with their duties.

EPSTEIN: I think you're reflecting some of the suspicion that people have of the reason behind school board policies. I think these suspicious people are in the minority. The real reason for writing policies is to save time and trouble. In fact, right on my own board, we find it difficult to remember a policy in July that may have been made the previous November. Without written policies, there's danger of going through all the policy-making steps a second time just because the circumstances changed slightly. In addition, what board member can be expected to remember policies which were laid down six or seven years before?

Q. Is it possible for a school board to establish a "permanent" policy that carries over to the next board? Most school boards believe that they cannot make rules for their successor board.

RADKE: All policies are—or should be—subject to regular review and revision. But you really can't review policy unless you know what it is. So you write it.

Q. Should a board re-ratify policies at the beginning of each school year?

RADKE: In our study we recommended a "regular review." That leaves it to local option as to

"when" and "how often." We only suggest that it be done regularly.

EPSTEIN: Our board has written into its manual that existing policies will be ratified following each election after the new school board is sworn in.

Q. Isn't it a pretty formidable job to review all policies at once?

EPSTEIN: We don't do it that way. We have followed the recommendation of Mrs. Radke's joint committee by putting our policies in a looseleaf book. Each policy has a date on it so we can follow a program of regular review by referring to these dates. Our annual ratification isn't a review. From time to time, during the year, we find we can't get agreement on an action based on present policy. When that happens, we assign a review of that policy to a committee appointed by the president of the board. It submits its recommendations at the next board meeting.

Q Mrs. Radke, in the book that was produced by the joint committee, "How to Develop Written Policies," you laid down five reasons why written policies were needed. You gave as your first reason "to bring clarity to school operation." Were you referring to the possible overlap of the school board and the superintendent?

RADKE: Yes, although this is only a part of what we had in mind. We believe that the policy manual should make it clear how the board itself functions and how the school administration functions. For example, we believe the manual should include the board bylaws, and spell out such matters as the duties of the school board, the conduct of meetings, and the duties and responsibilities of board officers. These things are better understood and followed when they are written. We believe that the policy manual should include a clear statement of the educational philosophy and objectives of the school. We believe that other major sections of the manual should be devoted to policies dealing with personnel, with school administration, business and operational procedures, students, instruction, and with school-community relations.

Q. Would you give a specific example of a policy statement which brings clarity to school operation?

RADKE: One of the most important statements which any board adopts —and one which gives clarity to its entire school operation—is that which expresses its philosophy of education and states the objectives of its educational program. In my own school district our statement begins something like this: "The Port Angeles schools try to provide the best education possible for every child in the district. This effort is continued with each child as long as he can profit from attendance and his conduct is compatible with the welfare of the group." We go on to say that we recognize the varying aptitudes of children and strive to adapt the educational program to develop the talents and interests of each to the maximum. Let me illustrate how that statement helps us. Take a case involving discipline of a pupil. Suppose suspension or expulsion is involved. We can refer to our statement where we say "as long as he can profit from attendance and his conduct is compatible with the welfare of the group."

Q. Then you refer to this statement of philosophy frequently to clarify situations?

RADKE: Yes, we keep coming back to it.

Q. When you say *you* come back, do you mean that the board makes this decision or that the administration derives its authority from the statement?

RADKE: Well, we have a pretty cooperative system in my district. We discuss these things with our superintendent. Generally they—the administrators—make their recommendations and we approve and they proceed. After they've had some experience with a new program, they report their progress.

"We believe a policy manual should make it clear how the board functions."

RADKE

Q. Would it be fair to say, then, that a school board policy should be broadly stated so that the administrator can interpret the specifics?

EPSTEIN: Yes. The policy should give the administrator a clear line of board *intent* and a clear feeling of what the board wants. But I don't think it should be extremely restrictive. We don't want to make decisions for the administrators.

Q. Then you don't feel there's any necessity, with written policies, for the administrator to come back to the board for approval of specific plans?

RADKE: Well, let's put it this way. Broad written policies will substantially reduce the number of detail items which the superintendent must bring to the board. I believe this very fact encourages and stimulates his initiative and professional leadership. However, I would like to emphasize that the board and the superintendent work as a team and that there is close coordination between the board in its role as a policy maker and the superintendent in his role as an administrator.

continued on page 74

How to help your teachers

The key to a good English program is plenty of writing. But how can a teacher cope with the written work of 150 or more pupils? Here's a solution that is making headway.

■ ■ ■ Consider the situation of the typical English teacher today: Mr. Carruthers has 150 senior high school pupils in his five daily classes. He knows that his students ought to write at least one paper a week—but they don't.

Why not? With each writing assignment, Mr. Carruthers commits himself to some 25 hours of reading and grading papers. At the best rate that experienced readers are able to maintain, it takes an average of 10 minutes to grade and correct a paper —in order to do an honest job. Mr. Carruthers will read papers three hours every school night and 10 hours every weekend before he finishes 150 papers.

It isn't surprising that many English teachers have "solved" this problem by assigning fewer themes. In fact, according to Paul B. Diederich, research associate, Educational Testing Service, Princeton, N. J., many high school students now write only four or five papers a year. And the prospect of improvement in the immediate future is less than bright. Many administrators are convinced that by 1965, English teachers' loads will average 200 pupils daily. The chances of increasing guided practice in writing will be slimmer than ever.

How, then, can you insure that students in your district will learn to write in the only way possible—by writing? Employ qualified "lay readers" from your own community to assist your English teachers.

What is a lay reader?

Diederich, working under a grant from the Fund for the Advancement of Education, has been directing an ETS pilot lay reader program for the past three years in 16 widely-separated school districts around the nation. (*See box, page 42, for a listing of these districts.*) Under the plan, college-educated housewives in these communities have been recruited and successfully trained to assist teachers in correcting and grading written assignments.

Easy to find

No district reported any difficulty in finding qualified people to serve as lay readers. In fact, in every case, the response to initial requests for applicants far outstripped the number of jobs available. Candidates were carefully screened before being hired. They were given four tests—verbal "intelligence," paper-grading, paper-correcting and writing skill. Up to one dozen were finally selected from the top 20 in each district to serve as readers and alternates. A reader usually worked with one teacher, assisting in two classes of about 30 students each. The districts included in the pilot study averaged eight such readers, so that a total of almost 8,000 students were affected by the lay reader program.

What the lay reader does

The reader's function is severely limited. As Diederich puts it, "Readers are to teachers what nurses are to doctors." There are certain tasks that the reader can perform, but under no circumstances does she assume a teacher's classroom duties. Districts participating in the pilot study were told that any attempt to *replace* teachers with readers would result in discontinuance of the program in their area.

Each reader worked very closely with her assigned teacher. She was briefed on the telephone when a new crop of papers was ready for marking and told what points to look for in grading them. She had to come to the school, pick up the papers, correct and grade them at home and return them to the teacher. If the teacher thought it necessary, the reader was asked to sit in on the classroom discussion of papers or private conferences with individual students.

Cost to your district

Readers were paid 25¢ per paper, 10¢ for checking papers that were rewritten and $1.50 per hour for time spent in the school conferring with students or the teacher. At these rates, if you were to set up in your own district a program similar to those of the pilot study, your cost per pupil assisted should come to not more than $5 per year.

The cost is moderate. But what will you get in return for the money you spend?

Results of the program

All those involved in the ETS study—teachers, readers, students, parents and administrators—were quite satisfied with the results of the experiment. Over and above the obvious saving in time for teachers —time snatched evenings and weekends to correct papers—the most fruitful result of the use of lay readers was the care and attention given to grading and correcting.

Readers used morning hours, when they were fresh and alert, to

improve English instruction

examine written assignments and could afford to be sympathetic and attentive to what they were reading. As a result, their comments on individual papers were more detailed and meaningful than the hurried, stereotyped criticism to which teachers are often forced to resort. Guided practice in writing, if it is to be effective, demands the kind of close attention that only the qualified reader now has time to provide.

You may feel that the situation in your district has not yet reached the point where you must resort to lay readers. Nevertheless, you would be wise to look into the possibility of inaugurating a program such as this one for two important reasons:

1. If your English teachers are handling five daily classes of more than 25 pupils each—and chances are that this is the case—guided writing practice in your schools is suffering already.

2. When pupil loads for English teachers reach 200, five years from now, you will not be able to set up a smoothly-functioning lay reader program overnight. Readers must be trained to perform effectively. The best training in the world is practice for a year or two before the point of critical overload in student enrollment is reached.

How to set up your own program

Hiring lay readers to assist your English teachers is relatively simple. (*The box on this page presents a detailed timetable you can follow.*) Here are the four major steps involved:

1. Check certification requirements. Before going ahead with your plan, check with your state commissioner of education to determine whether or not it is legal to employ lay readers in your schools. (Remember, readers don't have teaching certificates.) Diederich suggests that if a provisional certificate

TIMETABLE OF A TYPICAL LAY READER PROJECT

The Jackson Municipal Separate School District, Jackson, Miss., was one of the participants in the ETS lay reader pilot study conducted in 16 different cities. This calendar of events provides a guide to the procedures you'll have to follow to set up a similar program in your own district.

Month of August	Press releases to secure names of interested candidates.
September 10	Meeting with participating teachers to explain program and distribute materials.
September 11	Information sheet mailed to candidates announcing date and place for general orientation meeting and testing.
September 16	Meeting of all lay reader candidates in orientation and testing session. A full explanation will be given of the whole project at this time.
September 17-20	Tests are graded by teachers who are participating in the project.
September 22	Mail invitations to qualifying readers announcing tea at school on September 25.
September 25	An afternoon tea is held at each school at which time the principal will meet with the participating teachers and the qualifying lay reader group.
September 30	Principal meets with teachers to select specific readers to work with specific teachers.
October 1	Announcement is sent to selected lay readers informing them of their selection and to all others announcing their placement on the alternate list for a call later, if needed.
October 1-3	Teachers hold informal meetings with their readers to explain mechanics, grading, how to get papers, when to return, how to complete vouchers, etc. Arrangements for meeting of teacher with lay reader are made by the teacher.
October 3	Begin program. At least 12 papers from each student to be graded and corrected by the reader—four by the teacher. A paper will usually be assigned every two weeks.

is required in your area, request that it be issued to those candidates who:

- hold college degrees;
- have adequate backgrounds in English;
- scored well on your four screening tests;
- have been accepted after an initial interview.

After these readers have satisfactorily completed one semester of service, submit a statement of your satisfaction with their performance for permanent certificates.

2. Round up your candidates. After checking into the legal aspects of your plan, issue a call for prospects through the PTA, the AAUW or the local press. If the pilot study is any barometer of the interest you'll stir up among your community's college graduates, you can expect from 60 to 600 inquiries. It would be a good idea for you to hold a preliminary meeting at this point, during which you can explain to all the candidates what their duties will be and how they are to be screened for the jobs available.

3. Test your candidates. During this same meeting, the four tests mentioned earlier can be given. Copies of these are available to high school principals, upon request, from ETS. (The experience of districts in the pilot study indicates that the initial meeting and administration of the tests should take no longer than three hours.)

4. Interview the finalists. Invite the 20 applicants with the highest scores for personal interviews with your English department head and those teachers with whom they will work. This is an extremely important part of your recruitment program. The readers you select will be in close personal contact with the teachers they are to assist. It is better to know now, rather than later, whether your readers and teachers can get along together.

Further pointers

A number of suggestions about how lay readers can be used best in schools grew out of observation of the pilot study. Diederich's first recommendation is that teachers be persuaded to take the same four screening tests given to your candidates. The results provide standards by which you can judge the levels of competence of your readers.

In addition, you might be able to draw some conclusions—over a long period of time—about what kind of teacher is most effective in improving students' writing skills. How important is a teacher's verbal aptitude, for example? Or his own writing ability? Are superior, bright teachers best suited to bright pupils? Or are they equally effective in dealing with average or dull children? Not much is really known about the importance of such factors in the teaching of writing. Your lay reader program can afford you an excellent opportunity to search out some of the answers.

It is suggested, too, that each teacher personally read and grade every fourth assignment, leaving the intervening three to the reader. In this way he can keep in touch with the progress being made by the pupils in his classes. (Of course, he will also see the reader's grades and comments.)

Some kind of before-and-after method of measuring writing improvement should be set up to evaluate the progress of your students under the lay reader program every year. Essays on the same choice of topics assigned at the beginning, middle and end of the school year, graded by teachers who do not know when or by whom each paper was written, will show to what extent students have improved in writing ability.

Finally, by scheduling departmental meetings once a month for both teachers and readers, you can work out cooperative solutions to problems of evaluating student writing. At the same time, suggestions and discussions of how writing can be better taught should be welcomed and encouraged.

After lay readers, what?

Once you have had some experience with lay readers in your schools and have found them helpful, you may be interested in pursuing other means of improving the teaching of English. One such program, now being developed by Paul Diederich and a group of outstanding high school English teachers working together at Rutgers University, is known as The Rutgers Plan for Reducing Class Size. Chicago and Detroit will try out this plan next year in selected high schools.

Among the unique features of this proposal are the following:

- Teachers will never have to meet with groups of more than 25 students.
- Teachers will have one day a week, completely free of classroom duties, to confer with exceptional students or those requiring special help.
- Students will attend conventional classes twice a week. The three remaining sessions will be spent doing supervised reading and taking tests to determine their understanding of self-correcting homework exercises. (*See "Self-correcting English homework," SM, Jan., '60, page 62.*)

LAY READER PILOT STUDY

For the past three years, Educational Testing Service, Princeton, N. J., supported by a grant from the Fund for the Advancement of Education, has been conducting a nation-wide lay reader study. High schools in the following 16 cities which participated in the program have hired college-educated housewives as readers to assist English teachers in grading and correcting papers.

Allentown, Pa.
Austin, Minn.
Bound Brook, N. J.
Denver
Des Moines
Detroit
Durham, N. C.
Elmhurst, Ill.
Ithaca, N. Y.
Jackson, Miss.
Mansfield, Ohio
New Albany, Ind.
New Brunswick, N. J.
Sheboygan, Wis.
Seattle
Tyler, Tex.

Lay readers will play an important part in this proposed program. So will college-educated housewives in other non-teaching capacities—as "free reading aides" and "technicians." It is estimated that a high school with an enrollment of 2,000 students will require 10 English teachers, 10 lay readers, four free reading aides and four technicians. Total cost for such an arrangement would be $1,000 less than it would cost to have enough additional teachers to reduce pupil loads to 150 students per teacher. But under the Rutgers plan, loads would be reduced to 20 students per section and teachers would meet these sections only twice a week. Most important, an average of 16 papers per student per year would be guaranteed.

With high school enrollment expected to jump to 11 million by 1965 (from eight million-plus today) and enough qualified teachers to handle the increased student population . simply unavailable, some plan such as this one will surely be needed. Until it has proved feasible, however, a good way to start preparing for the bulging classrooms ahead is to explore the possibility of using lay readers in your schools right now.

"Students get more actual writing practice than they would under a conventional program."

WALKER

Questions and Answers

■ To get an accurate picture of a lay reader program in action, SCHOOL MANAGEMENT interviewed school administrators from Jackson, Miss., one of the cities participating in the ETS pilot study. (The Jackson schools have 28,000 students, 1,000 teachers.) An editor met with Superintendent Kirby Walker and Harry Kirshman, assistant superintendent. Here are their comments about the use of lay readers in their district.

Q. Mr. Walker, how were you able to rally support behind an untried, exploratory program such as the ETS pilot study?

WALKER: When the first overture was made by ETS, we held a conference of administrators to decide whether or not we should move experimentally in the direction of readers for English teachers. Most thought we ought to be willing to try it, so we presented the idea to our board of trustees. In a memo to the board, we carefully outlined the purpose of the program and stressed the fact that we would in no way be committed to it after the first year. The members agreed that the idea was worth a trial. Their cooperative attitude was a major factor in getting acceptance for the lay reader idea.

Q. What about your teachers? Did they have any reservations about turning over part of their functions to non-teaching readers?

WALKER: Not after the program was thoroughly explained to them and their school principals by Dr. Kirshman. It was emphatically established at the outset that teachers would still be totally responsible for all classroom pupil-teacher relationships. Both students and administrators realized that the teacher was still completely in command of the learning situation.

Q. Are you satisfied with the way your experiment has turned out?

WALKER: I think the fact that we're engaged in the program for the second straight year is answer enough.

"Teachers are able to make an added effort, over and above the regular program of instruction."

KIRSHMAN

Q. What led you to decide to continue?

WALKER: The most important factor, I think, was the favorable attitude of our teachers. Though we've had no formal evaluation from ETS as yet concerning the progress our students may have shown, all the teachers who participated felt that the assistance of lay readers was really a great help to them.

They were very interested in continuing the program. In fact, all but one of them volunteered to participate again this year.

KIRSHMAN: This keen interest in the program was felt by our readers, too.

One of last year's readers became so absorbed in our attempt to improve students' writing skills that she completed courses for certification requirements on her own time and began teaching this year in one of our high schools.

Q. Perhaps the reduced loads the teachers had to carry had something to do with their approval of the program?

KIRSHMAN: Not at all, since the

continued on page 71

TOOLS OF THE SCHOOLS

A GUIDE TO BETTER MANAGEMENT METHODS

A realistic approach to pupil guidance

by DOROTHY R. STRAWN, *Chairman of Guidance, Shoreline High School, Seattle, Wash.*

■ ■ ■ "Should scores which pupils receive on national standardized tests be revealed to them and their parents?"

The staff of the Shoreline Schools, a suburban district of approximately 13,500 pupils north of Seattle, Wash., recently answered: "Yes, if . . ." In providing for the "ifs," it developed a new aspect of its home room guidance program which has enabled parents and pupils to plan more realistically for the future.

The basic tool for this self-appraisal program is a succinct and durable four-page manila folder titled "Four Year Plan and School Record."* There has been no additional clerical work for teachers in the use of this folder because it is completely student maintained. An added benefit: in the process of keeping the record up to date, pupils have learned a great deal about self-evaluation.

Revealing test scores

Although Shoreline secondary school counselors were well aware of the dangers of discussing test scores with pupils and parents, three developments in the 1950's caused them to take a long look at their earlier policy of keeping scores confidential.

First, with the development of more adequate aptitude and achievement tests, and scores which could be reported in percentile

FOUR YEAR PLAN

Requirements for Graduation:

1. Required courses are printed in the Four Year Plan.
2. 1 year of mathematics and 1 year of science must be completed between grades 10 and 12.
3. 28 total credits are required, Grades 10-12. (One credit is given for each semester in a course which meets 5 days per week.)
4. Transfer students should consult their counselor regarding credit requirements.

GRADE 9

		Grades 1st SEM.	Grades 2nd SEM.
English			
Washington State History			
World Geography			
Physical Education			
Homemaking (Girls)			
Science	Gen. Science		
	Biology		
Mathematics	Gen. Math.		
	Algebra 1 & 2		

GENERAL REQUIREMENTS FOR COLLEGE ENTRANCE
University of Washington — Arts and Sciences

The following subjects are required — in addition to Shoreline graduation requirements:

SUBJECT	✓
Foreign Language (At least 2 years of 1 language)	
Algebra & Geometry (1 yr. each)	
Laboratory Science (1 year)	
One additional year of Math. or Lab. Science	
2.0 Grade Average or better	

GRADES 10-12

ENTER YOUR SUBJECT CHOICES IN THE SPACES PROVIDED. (Use Pencil Only)

FIRST SEMESTER — GRADE 10	Gr.	Cr.	SECOND SEMESTER — GRADE 10	Gr.	Cr.
English 10			English 10		
World History			World History		
Physical Education			Physical Education		
Days Absent ____ Total Credits ____			Days Absent ____ Total Credits ____		

GRADE 11					
English 11			English 11		
U. S. History & Government			U. S. History & Government		
Physical Education			Physical Education		
Days Absent ____ Total Credits ____			Days Absent ____ Total Credits ____		

GRADE 12					
English 12			English 12		
Health					
Days Absent ____ Total Credits ____			Days Absent ____ Total Credits ____		

ADDITIONAL CREDITS

Date	Subject	Gr.	Cr.

CREDIT SUMMARY — *G.P.A.*

Grade 10	
Grade 11	
Grade 12	
Total Credits for Graduation	

*"Soltman-Waller Homeroom Guidance Folder." Copyright 1960 by George L. Soltman and Lynn T. Waller, Shoreline Public Schools, Seattle 55, Washington.

Members of this high school guidance staff tell their students—and their parents—*all* the facts they know themselves, including scores on standardized tests. Result: a truly cooperative program of guidance and counseling.

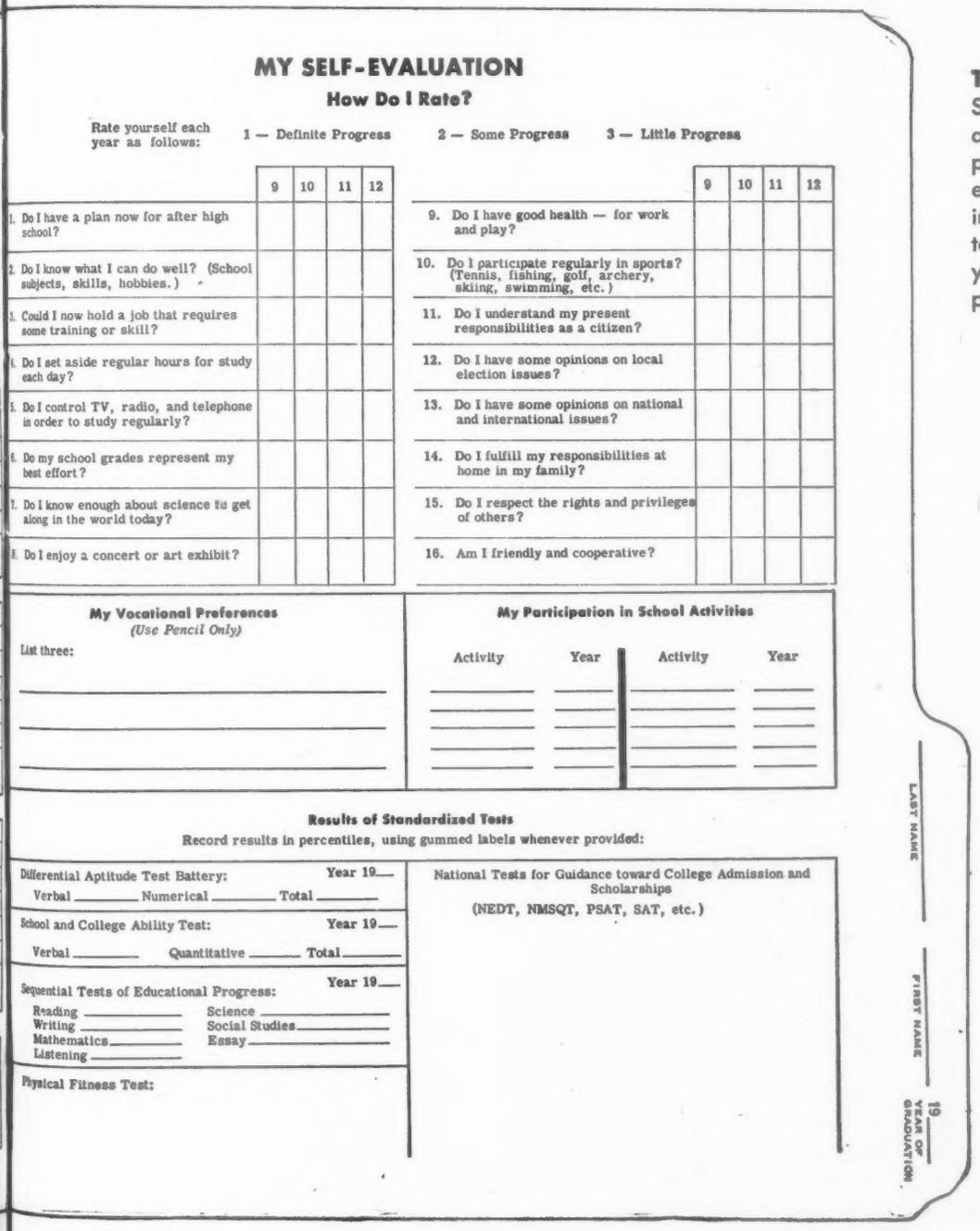
ranges, the dangers of parent misunderstanding of scores was diminished. Many of the objections to the old IQ had been eliminated entirely.

Second, the interest of pupils in the national scholarship tests made a decision imperative. Since parents were paying a fee for these tests, they felt they had, in effect, "purchased" the right to know the scores earned by their children.

Third, the youth of this high school generation hear on all sides that it is vitally important for each of them to evaluate realistically his own assets and limitations. Pupils seek the tools to analyze their chances for success at certain colleges or in particular professions.

What seemed needed was a method by which all objective data concerning a given pupil could be accumulated and placed in his hands at each "point of decision" in his educational planning.

To make the official records of the school available to pupils and parents was too cumbersome. The obvious answer was for the pupil



MY SELF-EVALUATION

How Do I Rate?

Rate yourself each year as follows: 1 — Definite Progress 2 — Some Progress 3 — Little Progress

	9	10	11	12
1. Do I have a plan now for after high school?				
2. Do I know what I can do well? (School subjects, skills, hobbies.)				
3. Could I now hold a job that requires some training or skill?				
4. Do I set aside regular hours for study each day?				
5. Do I control TV, radio, and telephone in order to study regularly?				
6. Do my school grades represent my best effort?				
7. Do I know enough about science to get along in the world today?				
8. Do I enjoy a concert or art exhibit?				
9. Do I have good health — for work and play?				
10. Do I participate regularly in sports? (Tennis, fishing, golf, archery, skiing, swimming, etc.)				
11. Do I understand my present responsibilities as a citizen?				
12. Do I have some opinions on local election issues?				
13. Do I have some opinions on national and international issues?				
14. Do I fulfill my responsibilities at home in my family?				
15. Do I respect the rights and privileges of others?				
16. Am I friendly and cooperative?				

My Vocational Preferences
(Use Pencil Only)

List three:

_____

_____

_____

My Participation in School Activities

Activity	Year	Activity	Year

Results of Standardized Tests

Record results in percentiles, using gummed labels whenever provided:

Differential Aptitude Test Battery: Year 19__
Verbal _____ Numerical _____ Total _____

School and College Ability Test: Year 19__
Verbal _____ Quantitative _____ Total _____

Sequential Tests of Educational Progress: Year 19__
Reading _____ Science _____
Writing _____ Social Studies _____
Mathematics _____ Essay _____
Listening _____

Physical Fitness Test:

National Tests for Guidance toward College Admission and Scholarships
(NEDT, NMSQT, PSAT, SAT, etc.)

LAST NAME _____ FIRST NAME _____ YEAR OF GRADUATION 19__

The key to Shoreline High School's successful self-appraisal program is a four-page school record kept by each student. Besides reducing clerical work of teachers, folders help teach youngsters the benefits of precise self-evaluation.

to keep his own unofficial records. To accomplish this, we designed a four-year plan and school record folder.

Four-year plan folder

The record folder is first given to the pupil in the spring of his eighth grade by the teacher who will assist him in his registration for grade nine. During the eighth grade home room period the class studies the purposes of the folder, as they are described on the cover. Each pupil reads: "This is a personal record. It belongs to you, and you will use it many times during your high school years. . . . When you graduate or transfer to another school, this record becomes your permanent possession. You will be proud to present it to your prospective employer, college counselor, or other persons interested in your future."

The teachers use this opportunity to discuss the values of making a record of which a student can be proud. They point out that the folder is completely blank, and that what is written in it will depend upon each individual pupil.

Organization of folder

On the first inside page (*see chart, page 44*) are listed requirements for graduation from a Shoreline high school, and those for entrance to the University of Washington—requirements which are representative of higher institutions throughout the state. Spaces are blocked off to guide the pupil in planning his subjects for all four years of high school, and a place is provided for him to record the grade and credit earned in each subject. Attendance is also made a matter of record on this sheet. The folder is completed in pencil during the planning of the high school program, and ink is used only to record grades, credits and attendance *after* they have become accomplished facts.

The second inside page is titled "My self-evaluation." Here the pupil, under the guidance of his teacher, records annually 1) his own evaluation of progress toward non-academic goals (*see chart, page 45*); 2) his present vocational preference; 3) his school activities; and 4) results of standardized tests.

The test section includes places for entering scores on the all-school tests. The names of the tests are pre-printed. Another section provides for the national tests for guidance toward college admission and scholarships.

Review of study habits

On the back of the folder are eight questions which cause the pupil to review his own study habits. For example, he asks himself: "Do I keep a well-organized notebook, including a record of current assignments? Do I recite and summarize frequently to discover and review ideas which I have forgotten?"

Review Your Study Habits

Do I:

1. Keep a well-organized notebook, including a record of current assignments?
2. Assume full responsibility for preparing all assignments as directed?
3. Know how to use reference materials which are available?
4. Follow a regular home study schedule—free from distractions?
5. Constantly attempt to improve my reading ability?
6. Read an assignment with a definite purpose—to answer a question, to establish a fact, to form an opinion?
7. Recite and summarize frequently in order to remember what I have learned?
8. Test myself in order to discover and review ideas I have forgotten?

This section reminds teachers to assist pupils in learning *how* to study, as well as *what* to study. In four years, a pupil receives guidance from at least four teachers in this important phase of his education.

Although the folder is introduced in grade eight, it does not begin to be fully used until the ninth grade; and each successive year its use is greater.

After ninth grade subjects have been selected and recorded, usually in early spring of the preceding year, the folders are returned to the guidance department where teachers and counselors review the subject choices. If any appear to be unwise in the light of the pupil's past record or test scores, follow-up conferences are scheduled.

The folders are then sorted into classroom groups according to the ninth grade placement. The pupil probably will not receive his folder again until first semester grades are issued, although they are in the hands of the teachers who may choose to use them in home room activities.

Before the report card is taken home, pupils record their own grades and attendance in their folders. This process is repeated at each semester grading period through grade 12, and folders are retained by the home room teacher or counselor in the interim. In this way folders are available for individual conferencing whenever they are needed, and the necessity for consulting the official school records is materially reduced.

Recording test scores

The first standardized test scores are available about the beginning of second semester of the ninth grade, and at least annually thereafter. Again, the pupil records his own scores at the time they are issued and interpreted to him.

Parents are invited to an evening meeting following the class period at which pupils have received these scores. The ninth grade parent meeting often coincides with the period when pupils are selecting high school subjects.

As the student progresses through high school, the data in the folder increases until, by grades 11 and 12, there is sufficient information to simplify the interpretation of relatively complicated test scores.

To students in the Shoreline district "know thyself" is not just a motto emblazoned on monuments and buildings, or printed on graduation programs. It is an important goal which they can reach through a planned program of self-evaluation, utilizing their folders as prime tools. And, best of all, there is no loss of class time while the evaluation is implemented. **End**

How to teach foreign languages to every grade school student

Every student in the Parkside elementary school, Roselle, Ill., is learning to speak a foreign language fluently. The goal of the program is to graduate bilingual eighth graders. Costs are hardly more than the salary of one teacher.

■ ■ ■ Seven years from now Parkside elementary school of Roselle, Ill., may well make American public school history. That year the school will graduate its first class of bilingual students.

This, at least, is the goal of Parkside school's language program which began with the 1959-60 school year. Every one of 556 students in grades one through eight studied one of three foreign languages—French, German or Spanish—one period *each day*. In addition, 46 talented students in grades one to six studied a second language, Russian, on Saturdays.

Parkside school may well be the only elementary school in the nation to embark upon such an extensive language instruction program.

No one has calculated the effect of an eight-year elementary school foreign language program yet. But studies of partial programs have indicated that the most natural years in which to teach children a foreign language are early elementary school years when they are still learning basic modes of communication.

Thomas Mayhew, superintendent of Roselle's public schools and the idea-man behind Parkside's language classes, estimates the cost of the program at $9.30 a student annually. Cost of equipment has averaged 46 cents a student the first year before reimbursement of 43% of the cost by the federal government under the National Defense Education Act.

An important reason for the relatively moderate cost is the one and only language instructor, Dr. Dale Whiteside. Whiteside teaches 15 periods a day. Each period runs from 10 to 30 minutes. Whiteside speaks 12 languages, but considers French, German and Spanish his specialities. Says Mayhew: "Admittedly we're pushing our teacher but he's willing and we're willing."

In the future, perhaps next school year, lies educational closed-circuit television which, in effect, will put the hard-working teacher in more than one classroom at once, allowing him to do the work of one or more additional teachers.

Laying groundwork

Parkside school's full-time foreign language program began only after careful groundwork, including two years of experimental language teaching.

Early in 1957, apprised of the value of a foreign language program, the Roselle school board sent Superintendent Mayhew to St. Louis to study one of the early foreign language programs for the gifted child in an elementary school.

During the 1957-58 school year a third-grade class studied Spanish at Parkside and a seventh-grade class studied French. The next year Spanish was taught in both the third and eighth grades. Seventh graders of the previous year continued their study of French.

A full-time teacher taught Spanish in those experimental years and teachers from Lake Park high school at Medinah, Ill., taught French.

At the end of the 1958-59 school year, Mayhew announced in a regular newsletter to parents (*see box, page 48*) that the school was ready to go ahead the following year with a language program for all students. He asked parents to indicate their children's language preferences on questionnaires attached to the newsletters.

Although a choice was offered only between Spanish and French, many parents cast votes for German, so it was added to the program. During the 1959-60 school year, 53 students studied German, 243 studied French and 260 Spanish.

Materials needed

The near non-existence of class materials for teaching foreign languages in the early grades has forced Whiteside to prepare his own syllabuses and exercises.

Superintendent Mayhew is confident that Parkside school will find it easy to hire highly qualified teachers to use these materials. When the school sought to employ an instructor for its Saturday Russian class, three men, all eminently qualified, applied.

The money to pay instructors and otherwise to finance a language program is money out of the pockets of taxpayers. Therefore, community acceptance of the program is essential. An apparent majority of Roselle's taxpayers has approved of their school's language program.

Parents help

Perhaps the fact that Mayhew, in effect, asked parents to help him plan the language program accounts for parents' approval of it. The questionnaires, which parents returned noting the language they preferred their children to study, was part of the plan. And periodic newsletters were used to impart to

How Roselle's parents were informed of their school's elementary foreign language program

Here is how Superintendent Thomas Mayhew announced the new elementary language program to Roselle's parents, asking them at the same time to indicate the language they would prefer that their children learned.

After two years of experimentation, and after study at Northern Illinois University, examination of the public schools in St. Louis, Mo., study of the National Defense Act, study of Dr. Conant's report and after study of current educational literature, all indicating the advisability and efficiency of teaching foreign language in the elementary school, it has been possible to employ a full time foreign language teacher for the Roselle Public Schools.

All of the studies definitely show that the elementary school is the proper place to teach foreign language. By teaching foreign language in the elementary school, it is possible to teach by an oral method so that the language can be used in conversations. The children are young enough to be able to mimic the pronounciation and inflection of the instructor. It is possible to teach the language over a long period so that skill is developed in the language.

If there is ever to be peace in this world, it will have to be on the basis of an understanding of other peoples. Of all the great powers in the world, America is the only great power which does not teach foreign language sufficiently well so that the citizens of America visiting foreign countries can converse with other peoples in their native tongues.

For the school year 1959-60, boys and girls in grades one through eight will have the opportunity to study either French or Spanish. Attached to this Parents' Newsletter is an enrollment form which should be completed and returned to the school indicating your child's choice of foreign language which he will study between September 1959 and his graduation from eighth grade.

If you have no particular preference, please so indicate so that the school will have flexibility in making up its sections. In case the choice is too one-sided in favor of either French or Spanish, the school may have to assign sections.

A few additional comments about the foreign language instruction would show:

(a) French was selected for instruction in the Roselle Public Schools because French is still spoken by more people as a second tongue than any other language.

(b) Spanish was selected for instruction because of its growing importance here in this hemisphere. In fact, as a member of the board of education pointed out, Spanish is advantageous even within two or three miles of Roselle.

(c) French and Spanish were both selected because of their relative ease of mastery. Once French or Spanish is mastered, a person truly interested in other lands, other peoples and other languages can very readily master other languages.

(d) The school has employed Mr. Dale Whiteside of Elgin, Ill. as its instructor. Mr. Whiteside will carry on the instruction in both French and Spanish.

parents a sense of involvement in the school's language program.

Mayhew surmised that another reason parents support the program is that they want their children to accomplish something they themselves were denied the opportunity to do.

There are those who charge that first and second graders are too young to learn foreign languages. Teacher Whiteside replies that younger children learn foreign languages more easily than their older brothers and sisters because they haven't settled into stereotyped, intractable speech patterns which often impede the learning progress of older children.

Preparing the high school

When the surge of foreign-language students reaches the local Lake Park high school, teachers there will have to be prepared to offer more challenging material. To keep themselves informed of progress in the language program, the high school language teachers have formed a committee which meets periodically with Whiteside.

What lies ahead for Parkside's elementary language program? "As our school and our program grow," says Mayhew, "it will be necessary to add more personnel to the foreign language staff. Now, it is our estimate that we can expand our program up to 1,000 and possibly 1,200 students, still utilizing the same instructor and providing the same well-rounded, comprehensive program aimed at teaching boys and girls skill and fluency in foreign language."

Closed-circuit classroom television is one possible step. Two bids have been received, both of them quoting prices less than $8,000 for equipment and installation in 16 to 20 classrooms. The NDEA again would pay part of the cost. Under a lease purchase agreement, classroom TV would cost slightly more than $2,000 a year for each of four years.

Mayhew is considering television rather than another instructor for fiscal reasons. Capital expenditures for television would end after four years, but another instructor would cost at least $5,000 a year continuously, he reasons. **End**

Courtesy of Hanover Park Regional High School, Hanover, New Jersey

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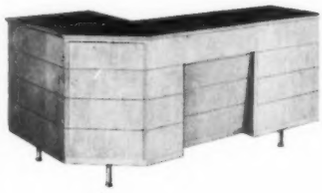

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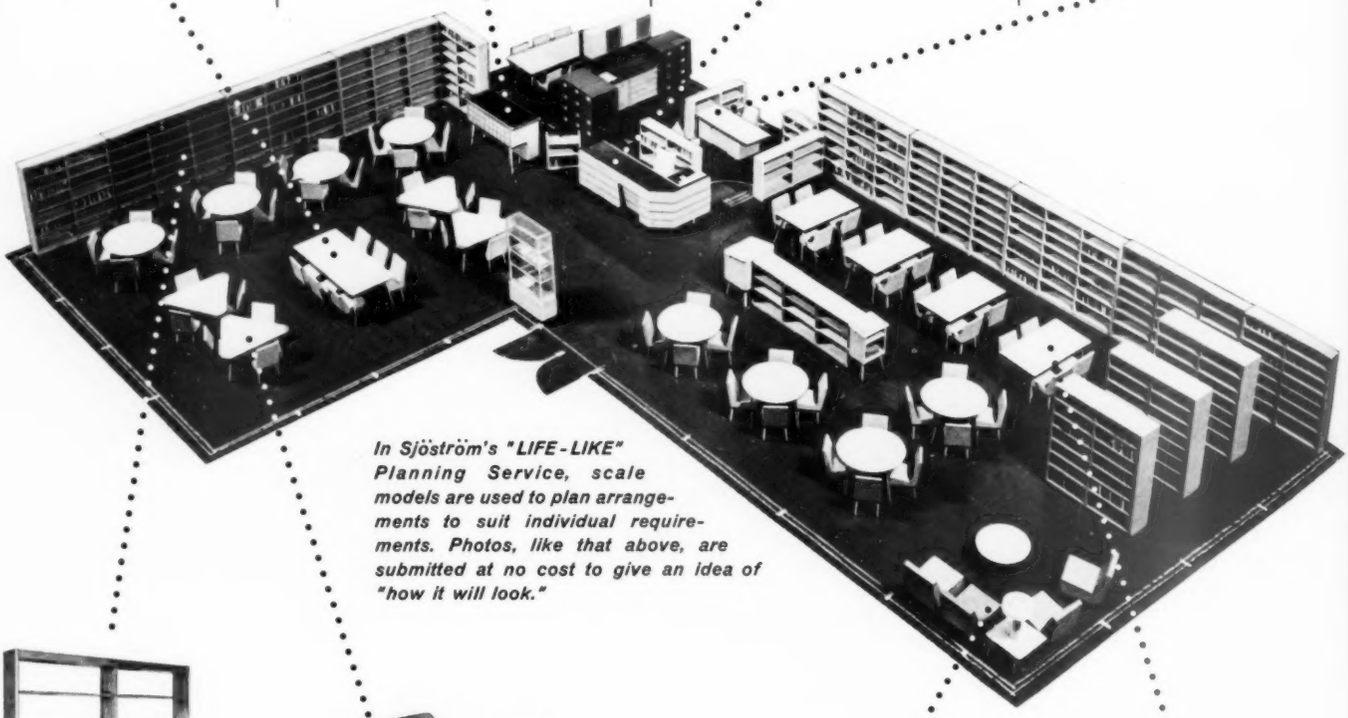

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THE FOURTH INSTALLMENT OF SCHOOL MANAGEMENT'S
COST OF EDUCATION INDEX

cei

How much should you pay for maintenance and operation?

In this fourth report on SCHOOL MANAGEMENT's Cost of Education Index, a close look is taken at expenditures for maintenance and operation and some conclusions are drawn concerning their relationship to the quality of your schools.

■ ■ ■ Plant operation and maintenance are really two sides of the same coin. Taken as a combination, the percentage of total current expenditures devoted to the operation and maintenance of school plants has not changed materially in the last 30 years. During the 1930-31 school year, the average school spent 13.4% of its total current expenditures on plant management. This figure rose to 13.9% in 1948-49, was at 13.1% in 1958-59 and rested at exactly 13% during the school year just ended. (*See the first installment of the Cost of Education Index, SM, April '60, page 105.*)

Although it is relatively easy to separate some maintenance and operational costs (for example, heat, utilities and supplies come under operation; whereas repairs, replacement of equipment and care of grounds are maintenance expenses), when it comes to custodial salaries the line becomes fuzzy. Thus, as the CEI tabulations will show, in some districts—more than half of the small ones—there are no custodial salaries attributed directly to maintenance. This doesn't mean that there isn't any maintenance work done. It simply indicates that most of these districts do not separate custodial salaries under maintenance from those under operation.

HOW MUCH ARE WE PAYING FOR CUSTODIAL SERVICES?

The role of the school custodian has undergone a major change in recent years. No longer can he be considered a "janitor" who pushes a broom and occasionally washes and waxes the hall floors.

Too many stories can be told of expensive facilities unused or even wrecked because untrained custodians did not know how to use them. (There is, for example, the incident of the architect who received a frantic call from a school superintendent on a Monday morning. The school's new pool had sprung a leak! All the water had run out! The architect had bungled his job! A quick check at the school building later that morning showed that an improperly-trained custodian had flicked the wrong switch before leaving the building on Friday night. Instead of turning off the lights, he had emptied the pool.)

There is perhaps a more important role for the custodian to play in a modern school program—the role of "assistant teacher" and guidance counselor. The good custodian can often "reach" students who will not respond to other members of the school staff. His position

HOW TO COMPUTE PER PUPIL EXPENDITURES FOR YOUR DISTRICT

It takes more money to educate a high school pupil than it does to educate a student in elementary school, according to Dr. Orlando F. Furno, of the U. S. Office of Education. And, because of the effects of sparsity, small schools have to spend more for the same educational services than large schools. Therefore, CEI's per pupil cost figures are based on "expenditure pupil units," rather than actual number of students.

Here's how expenditure pupil units were computed by Dr. Furno: Schools with an average daily attendance of less than 317 on the elementary level or 695 on the secondary level received a sparsity correction *(see below)*. Next, because for every dollar spent on an elementary pupil, $1.30 must be spent to educate a secondary student, secondary ADA was multiplied by 1.3 and then added to the elementary ADA. The resulting figure is called "expenditure pupil units."

To find out your district's per pupil costs, in terms of the figures given in the CEI, multiply all your elementary school pupils by one, all your high school pupils by 1.3. The total obtained is your number of *expenditure pupil units*.

Here's an example: District A has 2,000 elementary school pupils, no students in high school. District B has 2,000 high school students, none in elementary schools. District C has 1,000 elementary pupils and 1,000 high school students. If each district's net current expenditures total $500,000, District A's per pupil expenditures would be $250, ($500,000 divided by 2,000 students multiplied by one). District B's per pupil expenditures would be slightly more than $192, ($500,000 divided by the result of 2,000 multiplied by 1.3). District C's per pupil expenditures would be about $217, ($500,000 divided by the result of the total of 1,000 and 1,000 multiplied by 1.3).

In this case District A is spending more money per pupil than Districts B or C, despite the fact that all are the same size and are spending the same *total* amount.

With these weighted per pupil costs, it is possible for a district to compare itself with any other district in the nation, no matter what its pupil makeup.

If your district has less than 317 pupils in ADA in elementary schools or less than 695 pupils in ADA in secondary schools, a sparsity correction must be made to get your district's expenditure pupil units. If you will send a postcard to *School Management*, giving your school's elementary ADA and secondary ADA (separately), SM will calculate your expenditure pupil units for you.

and skills give him a stature in some eyes that is beyond that of a teacher. And, as "assistant teacher," he can perform a multitude of operations to make the teacher's work easier. (A custodian who will help elementary school students make cages for animals they want to keep in the classroom is making a real contribution to the educational program.)

Despite evidence pointing to the importance of custodians both to the educational program and to proper operation and maintenance of the school plant, custodial pay, in general, is very low.

Average salaries for operation range from just $1,700 annually in Region 6 to somewhat better than $4,600 in Region 9. Only in Regions 2 and 9 do annual salaries average more than $6,000 even among the Top Tenth districts.

Maintenance salaries are even lower. And among the smaller districts more than half pay so little specifically for this item that it shows up as a blank on the CEI returns.

Again, it's not that maintenance work isn't being done. But, as was pointed out earlier, many small districts do not bother to properly separate maintenance expenditures from those for operations. This is especially true in the salary categories, making average annual salaries a poor measuring stick for maintenance costs.

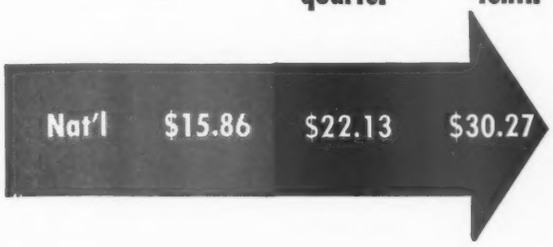
It is somewhat more revealing to look at the cost per pupil *(expenditure pupil units, see box, this page)* for maintenance and operational salaries, to get a better idea of how your schools stand in this area.

Here we find that the average school in the United States is spending $15.86 per pupil each year on salaries for operational personnel, *(see arrow, page 53)*. One quarter of our schools, the Quality Quarter, devote $22.13 per pupil to this item, and the Top Tenth schools spend $30.27. This represents a general increase of slightly more than 4% per pupil in the average and Top Tenth schools over the previous year. In the Quality Quarter schools, the increment was somewhat better than 7%.

On a regional basis, it is not surprising to find that Regions 5, 6 and 7 lag well behind the rest of the nation in allotting money per pupil to operational salaries, *(see tabulations, page 53)*. These regions are lower than the rest of the nation in almost all expenditures. But the fact that the average schools in these regions pay as little as one-third of what is paid in the average schools of some other regions (2 and

HOW MUCH ARE WE SPENDING PER PUPIL FOR OPERATIONAL SALARIES?

1959-60



REGION	Average	Quality quarter	Top tenth
1	$17.75	$20.88	$26.80
2	21.19	26.81	38.70
3	18.30	24.54	30.85
4	14.20	18.83	23.95
5	7.91	11.43	19.10
6	6.40	8.31	10.15
7	7.36	9.87	12.90
8	14.83	18.25	25.43
9	23.98	27.47	33.08

DISTRICT SIZE	Average	Quality quarter	Top tenth
1 (above 25,000)	$17.75	$27.13	$31.76
2 (12,000-25,000)	17.36	23.50	29.22
3 (6,000-12,000)	18.31	25.00	32.50
4 (3,000-6,000)	17.10	25.46	31.38
5 (1,200-3,000)	16.17	21.27	28.30
6 (600-1,200)	13.80	16.96	19.06
7 (300-600)	12.41	16.27	22.30

9) is shocking. It would indicate that in many schools, at least, money is not available to attract the type of custodian who would act as an "assistant to the teacher." As a matter of fact, even the Top Tenth schools in these regions are not paying as much per pupil for operational salaries as are the average schools in Regions 2 and 9.

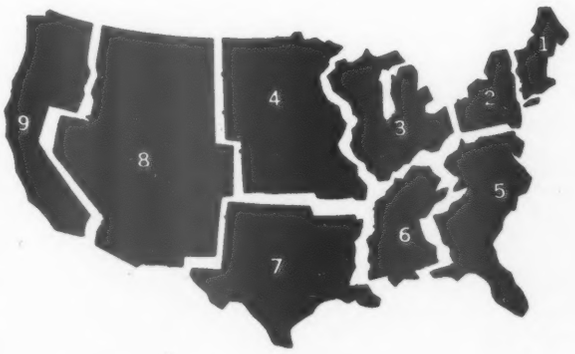
Let's look at the effect that size of district has on operational salaries. One might think that the smaller schools would be less able to devote money to custodial salaries. However, aside from the very smallest schools, the differences are fairly insignificant.

It is possible, of course, that our analysis of the ability, or willingness, of the smaller schools—and those in Regions 5, 6 and 7—to pay for operational personnel, is affected by the number of custodians involved. For example, it may be that these districts are really paying very good salaries, but that fewer people are being employed, holding the per pupil costs down.

Unfortunately, this is not the case. As the arrow shows, *(see page 54)* the average school has 4.81 operational custodians for every 1,000 students. The Quality Quarter schools have 5.97 and the Top Tenth 7.15. These figures have changed very little over the last two years—but the change has been *downward*. Most schools report *fewer* custodians per 1,000 students this year than last. (This can probably be explained by the growing school population rather than a cutback in the number of custodians. For example, a school with 500 students a year ago might have had two custodians. Although 50 more students attend the same school this year, no new custodians would be added, cutting down the ratio of custodians to students.)

On a regional basis, *(see tabulations, page 54)* variations in the adequacy of custodial

IN WHAT REGION IS YOUR DISTRICT LOCATED?



REGION 1: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.

REGION 2: New York, New Jersey, Pennsylvania.

REGION 3: Ohio, Indiana, Illinois, Michigan, Wisconsin.

REGION 4: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas.

REGION 5: Delaware, Maryland, Dist. of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida.

REGION 6: Kentucky, Tennessee, Alabama, Mississippi.

REGION 7: Arkansas, Louisiana, Oklahoma, Texas.

REGION 8: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada.

REGION 9: Washington, Oregon, California, Alaska.

staffing are almost imperceptible. Although Region 6 does have slightly fewer custodians for every 1,000 students, the difference is not nearly enough to explain away the huge discrepancy in expenditures per pupil on this item.

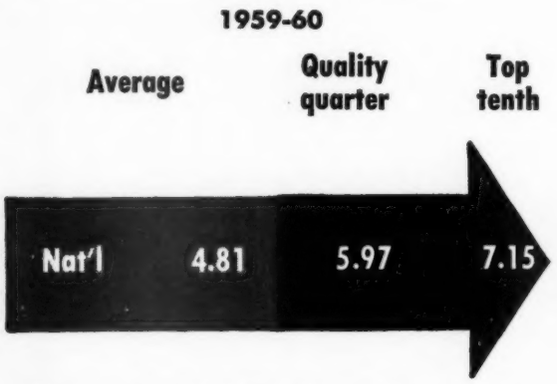
Now let's look at district size. We do find a range in custodial staffing adequacy which *does* appear to correspond somewhat to the discrepancy in expenditures per pupil. There are indications even here, however, that the expenditures per pupil on this item in the smallest districts are disproportionately low.

How about salaries and staffing to do maintenance work? As the arrow shows *(below, right)* expenditures for maintenance personnel fall well below those for operational custodians. Only $3.05 is allotted per pupil for maintenance salaries in the average schools. In the Quality Quarter $5.55 is appropriated, while the Top Tenth schools spend $8.71 per pupil.

When we turn to regional breakdowns, we discover one startling fact. In Region 1, so little has been allotted per student in more than half the schools that this shows up as a blank on the CEI tabulations *(see below)*. Another startling discovery is that average districts in Regions 5, 6 and 7, rank above Regions 1, 2, 3, and 4 in per pupil expenditures for maintenance salaries. The difference is not nearly enough, however, to offset low operational salaries in the same regions.

The larger the district, the more it pays for maintenance salaries per pupil. This is the inescapable conclusion that must be drawn from

HOW MANY CUSTODIANS DO WE HAVE FOR OPERATION?

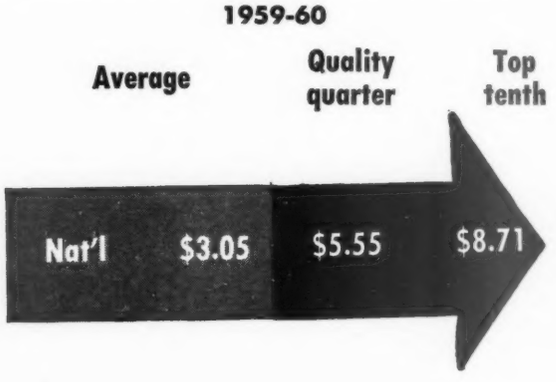


Number of operational custodians per 1,000 students

REGION	Average	Quality quarter	Top tenth
1	5.55	6.49	6.98
2	5.68	6.70	8.96
3	4.90	5.77	6.85
4	4.71	5.63	6.94
5	4.52	5.61	7.85
6	3.95	5.06	5.75
7	4.27	5.54	7.11
8	4.46	5.50	7.39
9	5.16	6.52	7.18

DISTRICT SIZE	Average	Quality quarter	Top tenth
1 (above 25,000)	6.01	7.11	8.02
2 (12,000-25,000)	5.45	6.19	6.96
3 (6,000-12,000)	5.28	6.62	7.50
4 (3,000-6,000)	4.76	5.78	7.09
5 (1,200-3,000)	4.73	5.86	7.22
6 (600-1,200)	4.16	4.80	5.23
7 (300-600)	4.01	4.92	5.97

HOW MUCH ARE WE SPENDING PER PUPIL FOR MAINTENANCE SALARIES?



REGION	Average	Quality quarter	Top tenth
1	—	$1.81	$ 2.80
2	$1.30	4.88	9.38
3	1.08	4.89	8.26
4	1.28	4.22	6.70
5	3.38	5.70	8.47
6	2.00	3.56	4.80
7	2.13	4.93	7.57
8	4.06	5.03	8.97
9	5.75	9.05	13.40

DISTRICT SIZE	Average	Quality quarter	Top tenth
1 (above 25,000)	$6.00	$9.42	$11.66
2 (12,000-25,000)	5.75	8.15	11.40
3 (6,000-12,000)	4.80	7.04	9.62
4 (3,000-6,000)	2.59	5.04	8.98
5 (1,200-3,000)	1.27	2.96	6.32
6 (600-1,200)	—	1.34	2.36
7 (300-600)	—	3.03	4.90

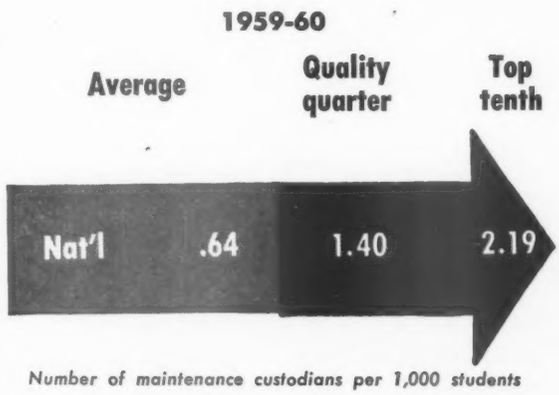
the CEI district size figures. The largest schools—whether they are average or fall into the Quality Quarter or Top Tenth—spend more per pupil on maintenance than the smallest ones.

We also see here, again, a case where expenditures per pupil are so small (in Sizes 6 and 7) that they show up as blanks in the CEI study. It is very likely that in many of these smaller schools, janitorial functions are carried out by the teaching and administrative staffs.

The low per pupil expenditures for maintenance salaries can be explained in part by the number of people assigned to these tasks. As the arrow *(see below)* shows, in the average school of the nation there is less than one full-time maintenance worker for every 1,000 students. In the Quality Quarter this jumps to 1.40 maintenance workers per 1,000 students and in the Top Tenth there are 2.19.

The relatively high placement of Regions 5, 6, and 7 in expenditures per pupil for maintenance salaries is explained by the fact that schools in these regions assign a greater number of persons to these jobs than do schools in Regions 1, 2, 3, and 4. On a district size basis, the larger districts staff far more heavily for maintenance work than do the smaller ones.

HOW MANY CUSTODIANS DO WE HAVE FOR MAINTENANCE?



Number of maintenance custodians per 1,000 students

REGION	Average	Quality quarter	Top tenth
1	—	.39	.99
2	.27	1.40	2.15
3	.31	.86	1.82
4	.50	1.04	1.85
5	.92	1.65	2.78
6	.79	1.04	1.59
7	.57	1.19	2.20
8	.85	1.47	2.18
9	1.21	1.91	2.66
DISTRICT SIZE			
1 (above 25,000)	1.56	2.13	2.70
2 (12,000-25,000)	1.32	2.05	2.44
3 (6,000-12,000)	1.01	1.59	2.49
4 (3,000-6,000)	.61	1.06	1.61
5 (1,200-3,000)	.40	.76	2.01
6 (600-1,200)	—	.13	.82
7 (300-600)	—	1.00	2.02

HOW MUCH ARE WE SPENDING ON PLANT OPERATION?

Studies made over a period of years have tended to show that expenditures for plant operation are a good indicator of school quality. Dr. Orlando F. Furno, in studies with the Associated Public School Systems, found that as operational costs rose, it could be assumed that school quality was also rising.

This is true because, basically, the object of school plant operation is to provide a superior environment for learning. It costs more to keep a school operating properly than it does to allow the building to deteriorate. On the other hand, it must be recognized that inflation takes a heavy toll in this area, too.

(Maintenance, Furno found, is *not* too good an indicator of school quality. This is because this budget item can be too easily affected by special situations—such as unusual weather conditions—which make expenditures uneven. Too many schools have no set maintenance program. When school expenditures increase rapidly, these communities may postpone needed maintenance work until a later date.)

The average school in the United States spent $28.98 per student on school plant operation this past year, *(see arrow, page 56).* This was an increase of $1.04 over the previous year. Quality Quarter schools spent $36.99 per student during 1959-60, an increase of $1.15.

Schools in the Top Tenth spent more than $46.86 per pupil on operating expenses during the year, just 29¢ more per student than they had spent the year before.

In terms of percentage of total current expenditures, the average school in the United States earmarked 9.5% of its total current budget for plant operation during the 1959-60 school year. Twenty-five percent of the schools allotted more than 11% and one out of 10 saw fit to spend 12.3% of its current budget for plant operation. These percentage figures remained substantially the same as during 1958-59.

Looking at operational expenditures on a regional basis, we find a familiar pattern—Regions 5, 6, and 7 fall far behind the other

HOW MUCH ARE WE SPENDING PER PUPIL FOR PLANT OPERATION?

1959-60

REGION	Average	Quality quarter	Top tenth
1	$33.00	$42.17	$50.78
2	37.38	47.95	59.30
3	34.30	40.76	47.81
4	28.66	33.80	42.10
5	15.50	21.50	31.57
6	14.88	16.00	21.80
7	15.94	19.15	21.28
8	26.08	32.86	38.42
9	35.27	41.81	47.73

six. In this case, however, it must be remembered that heating is an operational cost. Regions 5, 6 and 7 fall largely in the warmest parts of the nation, accounting for some of the difference. This is further borne out when we examine expenditures for Region 1 (New England). Ordinarily Region 1 ranks somewhere around the middle in expenditures, more often than not close to the lower end of the scale. But, because of high heating bills, Region 1 shows up quite high on operational costs. This region also spends a larger *percentage* of its total current expenditures on plant operation than states in the South.

Surprisingly, district size seems to have little bearing on the cost of plant operation. Although the Size 7 districts do lag somewhat behind the rest, only in the Top Tenth is the difference significant.

Heat and utilities

Aside from salaries, the two biggest cost items in plant operation are heat and other utilities. In terms of expenditures per pupil, the average school in the United States spent $4.88 this year on heat *(see arrow, this page)*. This was a decrease of 2¢ from the previous year.

One quarter of our schools are spending $7.06 per student and one out of 10 schools is spending at least $9.07. Both figures represent significant increases over the previous year.

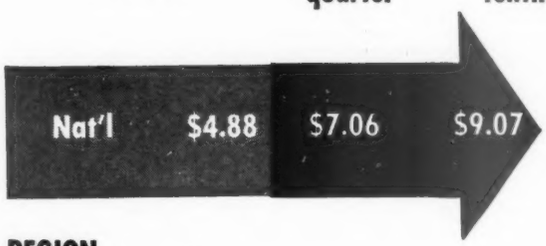
A predictable pattern can be found in the regional breakdowns. The warmer sections of the country show considerably lower expenditures for heat than do those in northern sections. Thus, Regions 5, 6, 7, and 9 show up quite low while Regions 1, 2, 3, and 4 are high. Region 8, which runs from Montana to New Mexico, is in the middle.

When we look at district size, we find a surprising pattern. Large districts tend to pay less than small districts for heating—on a per pupil basis. Since it is generally thought that huge heating plants and buildings are more expensive to operate than smaller ones, some explanation must be found for the discrepancy.

Actually, the answer is really quite simple.

HOW MUCH ARE WE SPENDING PER PUPIL TO HEAT THE SCHOOL PLANT?

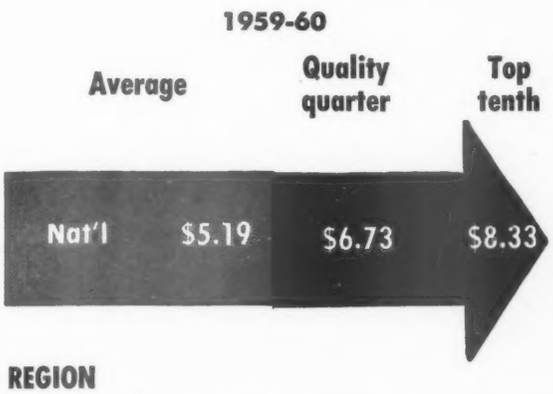
1959-60



REGION	Average	Quality quarter	Top tenth
1	$7.63	$9.81	$11.60
2	6.75	9.00	10.60
3	6.98	8.26	9.73
4	5.54	7.20	8.56
5	3.29	4.32	5.48
6	2.71	3.27	4.60
7	2.00	2.46	3.39
8	3.92	4.98	6.43
9	3.19	5.34	7.05

DISTRICT SIZE	Average	Quality quarter	Top tenth
1 (above 25,000)	$3.29	$4.38	$ 6.48
2 (12,000-25,000)	3.92	5.15	6.11
3 (6,000-12,000)	4.06	5.85	7.47
4 (3,000-6,000)	4.37	6.38	8.26
5 (1,200-3,000)	5.73	7.91	10.26
6 (600-1,200)	6.57	7.32	8.13
7 (300-600)	5.75	7.83	9.63

HOW MUCH ARE WE SPENDING PER PUPIL FOR UTILITIES OTHER THAN HEAT?



REGION	Average	Quality quarter	Top tenth
1	$5.60	$8.13	$10.34
2	5.96	7.82	10.23
3	6.05	7.60	8.84
4	5.25	6.57	7.69
5	3.78	4.50	6.04
6	3.56	4.31	5.27
7	3.72	5.10	6.60
8	4.65	6.23	8.18
9	5.91	7.42	8.55

First, on a per pupil basis, the larger heating plants are not more expensive to operate. As a matter of fact, under given circumstances they may be considerably less expensive. Perhaps a more important explanation can be found in climate. Many of the southern states work on a county-unit basis. These are automatically large school districts. Most of the really small districts in the nation are found in the usually colder New England, plains and mountain states.

Another factor is at work here. In general, the larger districts have more children in each classroom than do the smaller ones. The more children there are in a room, the more little heat engines (maintained at 98.6 degrees) are operating to warm the room. This may be very good for fuel bills but, admittedly, its educational value is questionable.

How about utilities other than heat? As the arrow shows *(see above)* the average school in the United States spent $5.19 per pupil on this item during the 1959-60 school year. One of four schools spent at least $6.73 per pupil and the Top Tenth earmarked $8.33 per pupil for this purpose.

On a regional basis, lowest costs occurred in the three southern regions—five, six and seven. With the exception of Region 8, all of the others are in approximately the same cost bracket. The differences in this item are probably basically due to the range of power rates, rather than to any natural in-school causes. A district size breakdown shows no significant differences at all, bearing out the belief that rates, rather than something about the schools themselves, are the key factor in determining utility costs.

HOW MUCH ARE WE SPENDING ON PLANT MAINTENANCE?

A sound maintenance program can make an important contribution to quality education. Eliminating fire traps, painting and lighting buildings, and keeping them clean and neat are rather obvious aids to a teaching program.

According to the CEI study, *(see arrow page 58)* the average school in the United States spent $10.67 per pupil on all maintenance costs during the 1959-60 school year. (As was shown earlier, $3.05 of this goes for salaries.) This was a rise of 88¢ over the previous year and also represents a slightly larger proportion of the total school budget.

The Quality Quarter schools spent $15.36 per pupil on maintenance this year while the Top Tenth splurged $19.86. Both figures represent a rise over the previous year.

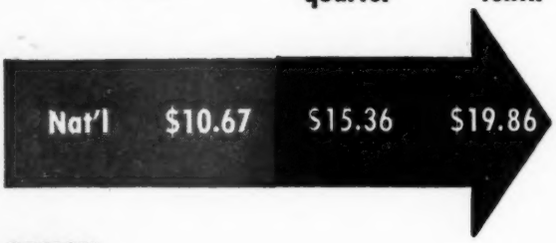
In terms of percentage of total current expenditures devoted to maintenance costs, the average school in 1959-60 allocated 3.5% of its budget to this area. One of four schools devoted 4.6% or more, while 10% of the schools spent almost $6 out of every $100 for maintenance.

Regions 2, 3, 8, and 9 spend more per pupil on maintenance than do the other five. This is true for the Average schools, those in the Quality Quarter and those in the Top Tenth. In Region 6, the lowest in the nation, maintenance costs among the Top Tenth schools still fall below the national average.

Looking at maintenance costs from a district size point of view, it is evident that the larger districts, on the average, spend more per pupil on this item than do the smaller districts. Note, however, that in the Quality Quarter and particularly Top Tenth districts, the small schools spend as much, or almost as much, per pupil as their larger neighbors.

The reason for this difference is probably found partially in record-keeping (as was pointed out earlier, in the smaller schools, salaries for custodians are charged mainly against operations rather than maintenance). Another factor may be the practice in many small schools of having male teachers undertake some of the janitorial functions. Again, their

HOW MUCH ARE WE SPENDING PER PUPIL FOR PLANT MAINTENANCE



	Average	Quality quarter	Top tenth
REGION			
1	$ 7.25	$10.88	$17.23
2	11.86	17.92	26.90
3	10.59	16.23	22.28
4	7.80	13.53	19.65
5	9.00	13.00	17.82
6	6.30	7.89	9.37
7	6.96	11.88	16.18
8	10.33	14.28	19.05
9	13.00	17.42	21.33
DISTRICT SIZE			
1 (above 25,000)	$11.81	$17.06	$21.68
2 (12,000-25,000)	12.71	16.98	19.47
3 (6,000-12,000)	11.70	16.06	20.60
4 (3,000-6,000)	9.26	14.88	21.65
5 (1,200-3,000)	7.99	12.06	18.16
6 (600-1,200)	7.63	10.10	14.26
7 (300-600)	8.73	13.50	19.65

salaries are not pro-rated, bringing down the maintenance costs per student.

As can be seen from these tabulations, there are great discrepancies in the amount different school districts pay for maintenance. Even among the top half of the schools of the nation (as shown here), expenditures range from just $6.30 per pupil to more than $27.

Even if we agree that these figures can be affected by such extraneous issues as different bookkeeping arrangements and unusual maintenance situations, it appears that many schools in the nation are not spending enough on maintenance. In earlier articles, the importance of maintaining a balanced expenditure pattern, so as not to hurt the quality of the current educational program, was stressed. Many of these schools are probably taking money from the maintenance program and using it to pay higher salaries to teachers or, more likely, to help pay for burdensome debt service and capital outlay expenses. It may appear at first that this is a wise distribution of available funds, but it should be realized that eventually poor maintenance must take its toll on quality education. The key is a balanced expenditure pattern if the current educational program is not to be hurt.

A delay of a year or two in repainting, some schoolmen reason, won't be noticed too much. Unfortunately for their districts, they are flying in the face of facts. Not only does a reduced maintenance program often bring real structural deterioration to a building, it can also have a demoralizing effect on the whole school program. If school authorities do not care enough to replace worn out light bulbs, sweep the cobwebs from ceilings and repair broken facilities, why should students and teachers react any differently? **End**

HOW THE COST OF EDUCATION INDEX WAS COMPILED

Hundreds of school districts participated in building SM's Cost of Education Index. Each filled out a detailed four-page questionnaire which itemized expenditures for dozens of budget items, for a two-year period (1958-59 and 1959-60).

This questionnaire was devised by Dr. Orlando F. Furno, who is presently with the U.S. Office of Education. It was at his suggestion, and with his guidance, that this project was developed.

The final total of school districts used in the carefully weighted sample was 583. Each was selected because it represented, by virtue of geographical location, size, and cost per pupil, a randomly selected unit ot measurement. The accumulated data is being processed in an electronic computer.

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Getting away from the

Here's an imaginative new entry in the field of schoolhouse design—the "pentagon classroom." In addition to savings in space, it suggests a fresh approach to the multiple use of teaching areas.

■ ■ ■ Classrooms have been rectangular ever since schools were first built. Students have always done all their studying in these four-sided rooms—whether listening to a lecture, watching a demonstration or participating in a round (or square) table discussion.

Now—at last—someone has suggested that we think in terms of differently shaped rooms for different forms of learning.

Shown on this and the following pages are a series of classrooms that are "different." They are different because they were designed to be particularly useful for television teaching.

Although television teaching was the catalyst for these designs, their implications go far beyond that medium. They are readily adaptable to many different kinds of teaching—including big and little classes, combined study halls, lectures and, of course, television. These pentagonal classrooms accommodate anywhere from 25 to 200 students. They conserve space and at the same time make more space available.

In these rooms small groups of 10 or 15 will no longer meet in areas designed to house 100 or more. And the problem of cramming 50 or 75 students into a room for 30 will be gone forever.

The rooms shown here were designed by Dave Chapman, Inc., industrial designers, at the request of the Educational Facilities Laboratories (EFL), an off-shoot of the Ford Foundation.

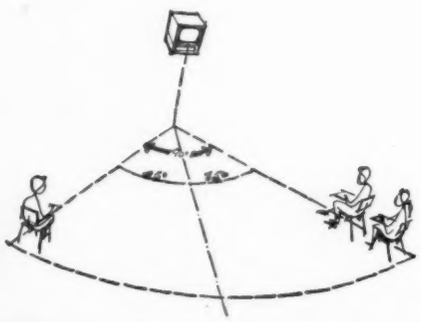
More than 500,000 students are now being taught by television. Many educators, if not most, now recognize the medium as a permanent teaching tool. But, unfortunately, existing classrooms do not easily accommodate TV viewing. EFL approached Chapman with this proposition: Design a room that provides a proper environment for TV teaching and is still useful for other purposes.

Chapman's solution, reported in a magnificent 96-page document,* helps to answer three important questions:

1. How can we accommodate television in existing schools?
2. What are the implications for the design of new schools?
3. What is the state of the art as far as the development of new instruments is concerned?

The material in this article is basically concerned with the second question—implications for the design of schools in the future.

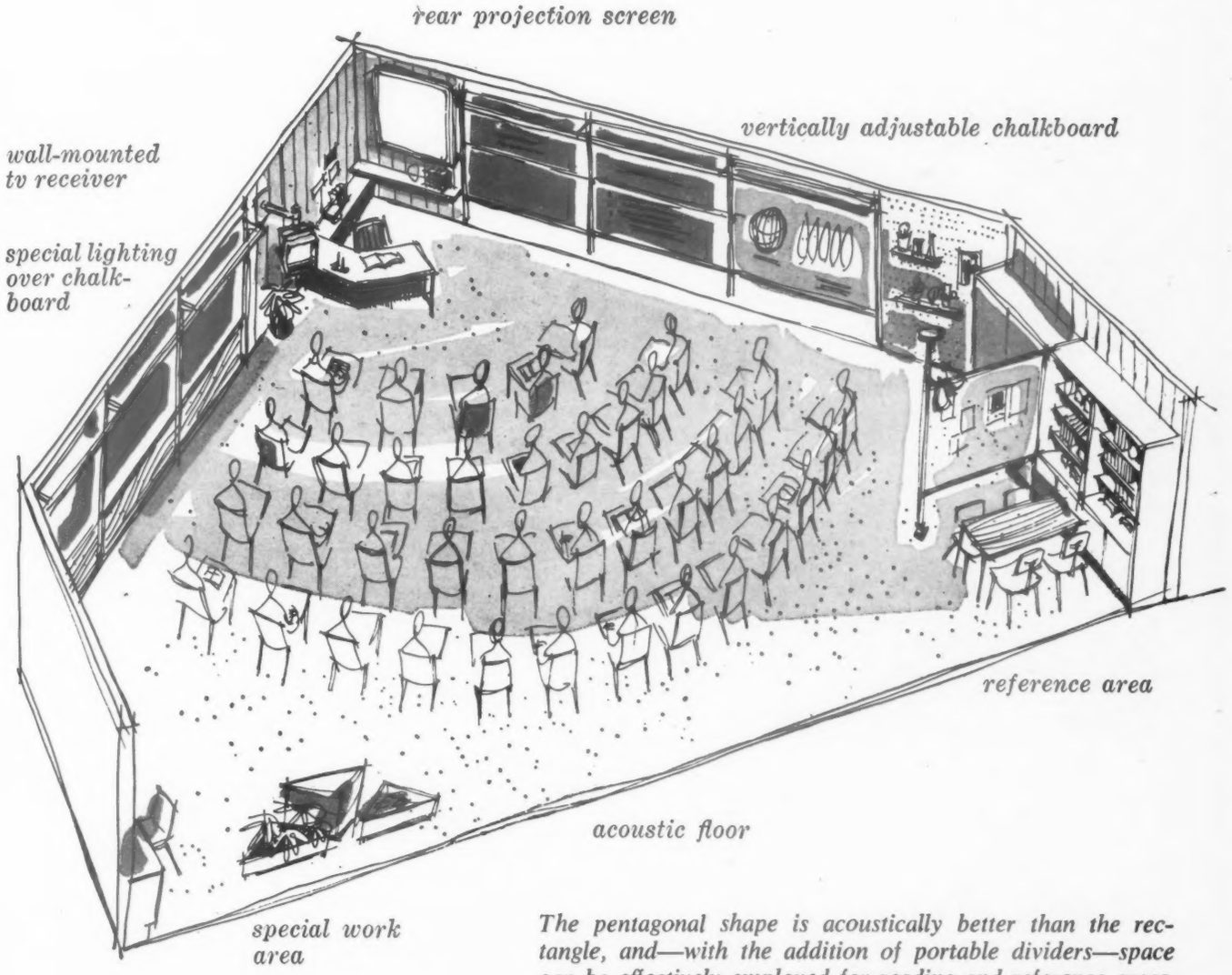
the horizontal viewing angle



If a TV image is to be seen with minimum distortion, the viewer should not be more than 45 degrees from dead center. This fact has strongly affected the shape of the proposed television classrooms.

* *Board members and administrators may receive a free copy of "Planning for schools with television" by writing: Educational Facilities Laboratories, 477 Madison Ave., New York City*

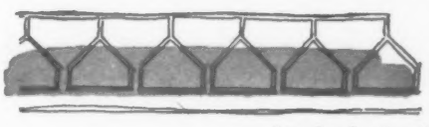
rectangular classroom



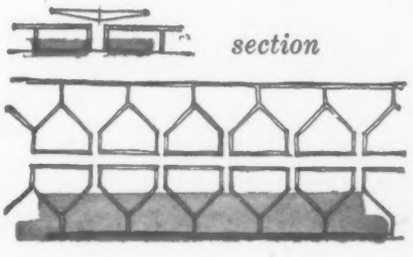
The pentagonal shape is acoustically better than the rectangle, and—with the addition of portable dividers—space can be effectively employed for reading and reference areas.

For 25-35 group

■ Spacesaving is not the only—nor the most important—reason for considering room shapes that are not rectangular. The Chapman organization started from a basic premise that once a group of students exceeds 10 or 15 (and is too big for a roundtable discussion) it should be oriented to a 90 degree control area, i.e., the corner of a room, rather than to a wider area. From this premise it would be possible to design a completely triangular room, but this would fail to take into account other uses to which the room might be put. By opening it up into irregular shapes, areas are provided for "things to happen" such as small group gatherings or individual study, without blocking off large areas of the room or disrupting other activities.



typical single-loaded corridor



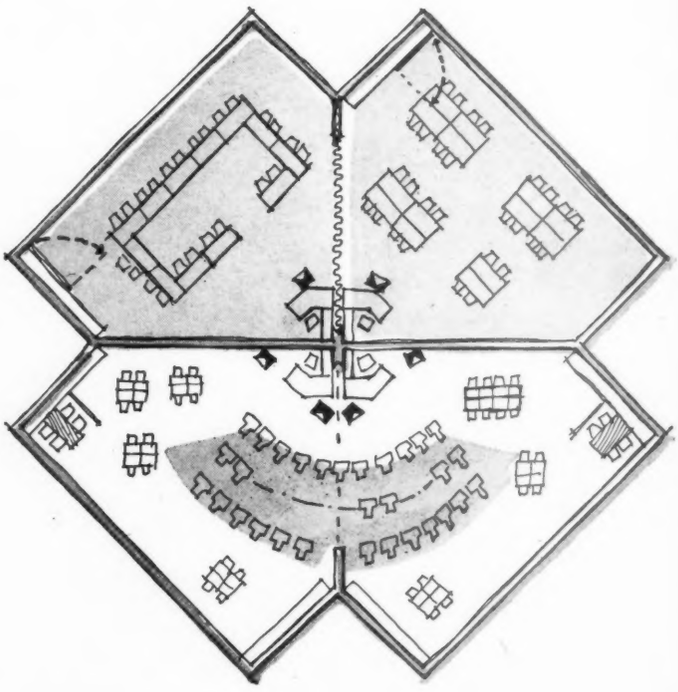
section

typical double-loaded corridor

continued

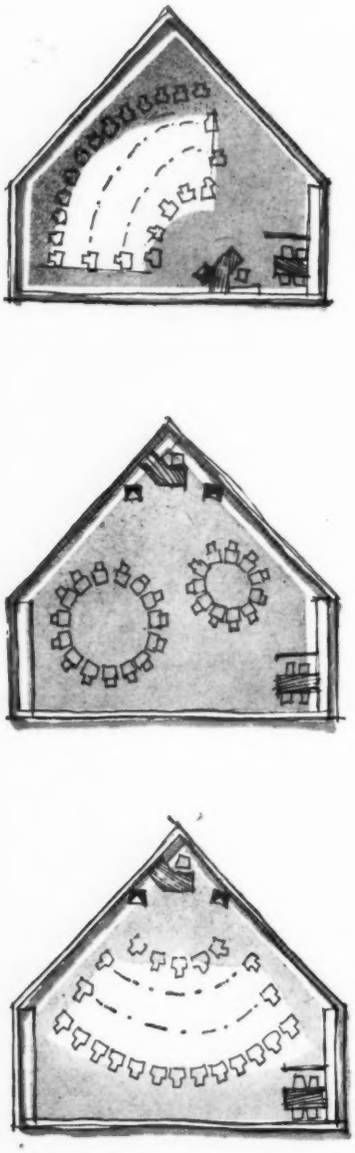
Class space

■ The astounding ease with which pentagonal shapes can be commingled becomes apparent when one examines the sketch at the right and the plan below. The acoustical barrier between the two rooms can be opened easily to permit two classes (up to 60 pupils) to operate under the guidance of a single teacher. When four classrooms are put together (*below*) a single modular building unit is provided. This four-room complex may be a single structure in a campus plan or, as shown on the following pages, it can be stepped up in size to provide more classrooms per building. Moreover, the four-room plan could be ideal for an addition to an existing structure and, with proper scheduling, might provide a flexible center for large and small group instruction, with or without TV.



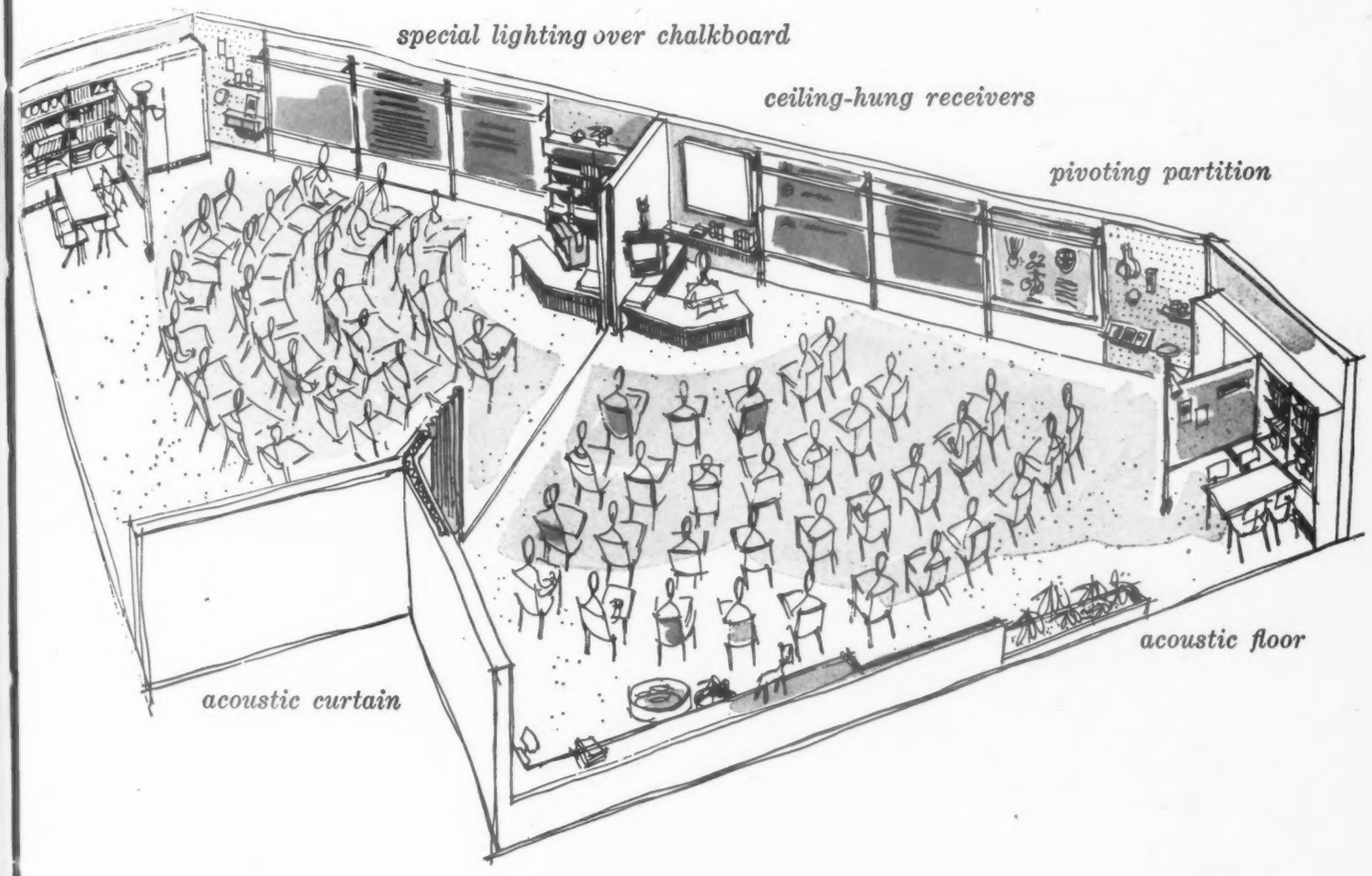
Even when two classrooms are combined, there is sufficient area for some students to undertake individual study while most of class is involved in watching a television presentation.

ALTERNATE SEATING ARRANGEMENTS



The pentagon shape adds flexibility in seating arrangements. Here are three possibilities, designed (from the top) to use one 24-inch television receiver, to present classwork to independent discussion groups without using the television facilities and to utilize the services of two 23-inch television receivers.

for the 40-60 group



At the heart of this plan is belief in the concept that a modern educational program must provide physical facilities for both large- and small-group instruction — and for individual conferences involving the teacher and one or two pupils.

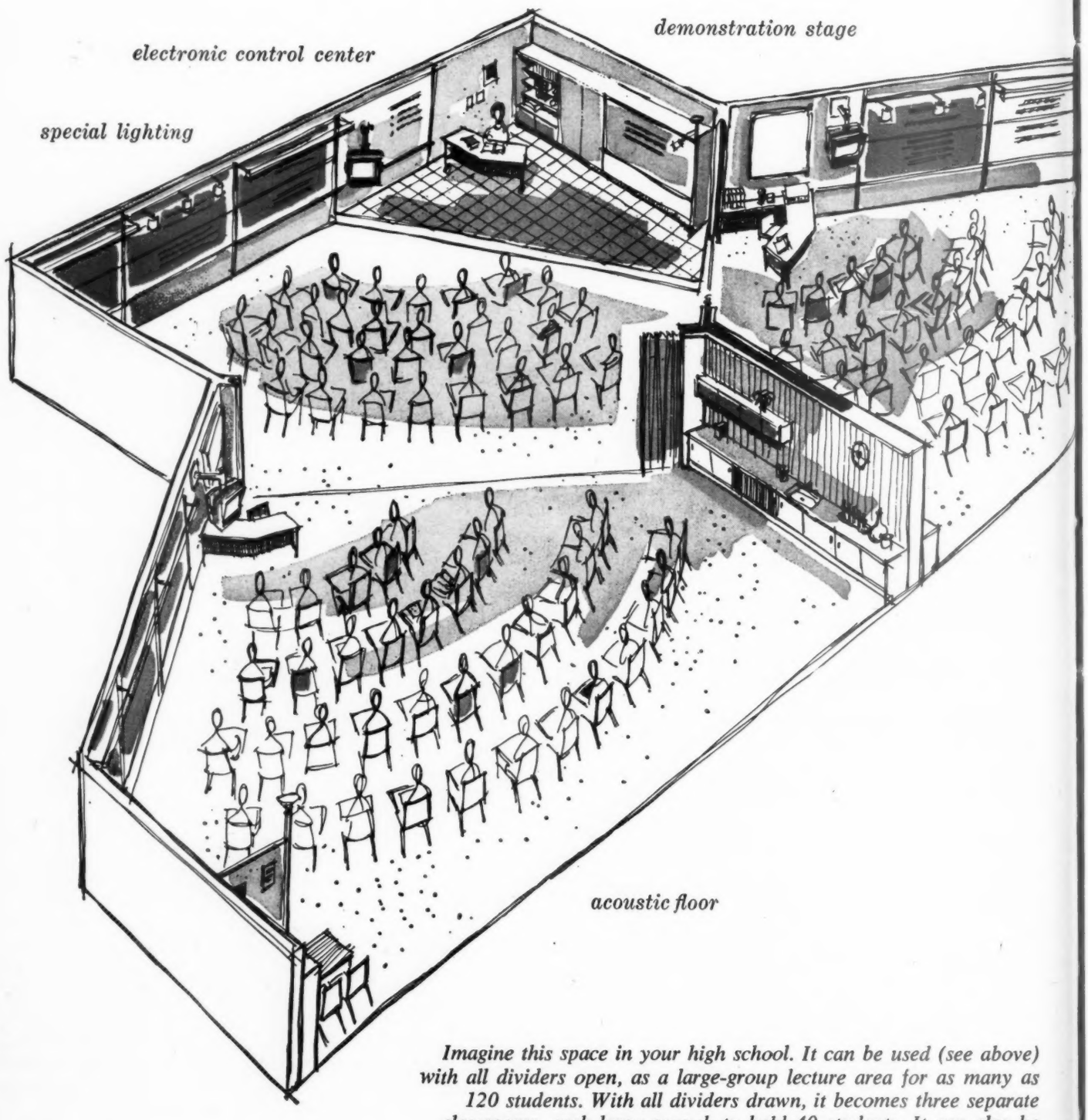
■ When J. Lloyd Trump presented his "Images of the Future" last year, he sketched a revolutionary change in instructional methods. According to Trump, a student in the future might spend 40% of his time in large-group instruction, another 40% in individual study, and 20% in small-group discussions. For the large group he predicted classes of 100 or more students conducted by a teacher specialist who would have available the best instructional materials and equipment. In the small group, a general teacher would supervise seminars, discussions, and recitation sections of from 12 to 15 pupils. He pointed out that today's conventional classes of 25 to 35 students are too large for problem solving and abstract discussions and far too small for presentations to be made economically by needed specialized teaching personnel.

Quite obviously, the standard classroom—even the average modern one—would place severe strictures on such a program. Two physical factors must obtain: space that expands and contracts, and good acoustical treatment. The "pentagon" discussed here is certainly not the only classroom shape that will accommodate these requirements. Chapman and the Educational Facilities Laboratories take pains to emphasize and illustrate what can be accomplished, with ingenuity, using both the rectangle and the square.

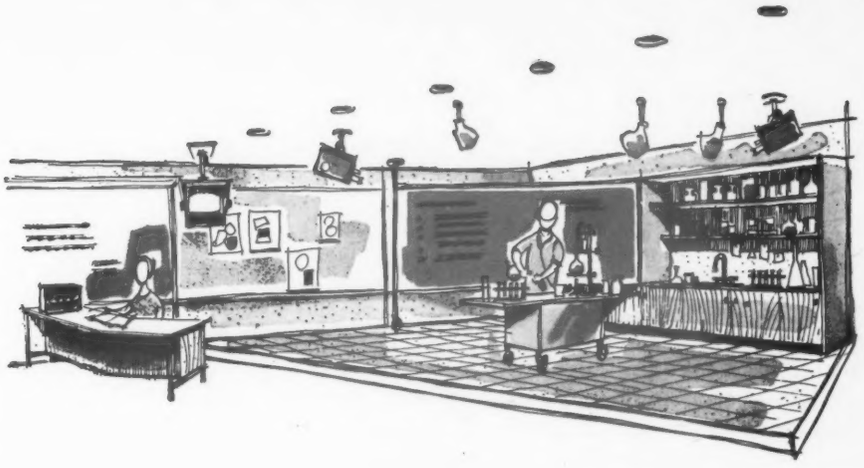
In examining the ideas projected on these pages, however, it is important to recognize that Lloyd Trump's concept of varying size groups, as well as increased use of TV, is at the core of Chapman's plans.

continued

Class space for the 90-120 group



Imagine this space in your high school. It can be used (see above) with all dividers open, as a large-group lecture area for as many as 120 students. With all dividers drawn, it becomes three separate classrooms, each large enough to hold 40 students. It can also be separated (see bottom plan on next page) so that it can be used by two separate groups of 60 students each.



This sketch shows a fixed-camera demonstration of a laboratory experiment which can be viewed simultaneously by an exceedingly large group.

■ The three-room complex at the left has been deliberately designed to provide a single focal point when the dividing walls are thrown open. The teacher's platform in the top room can also serve as a stage or a "studio" for closed-circuit TV transmission of a laboratory experiment or other close-up work.

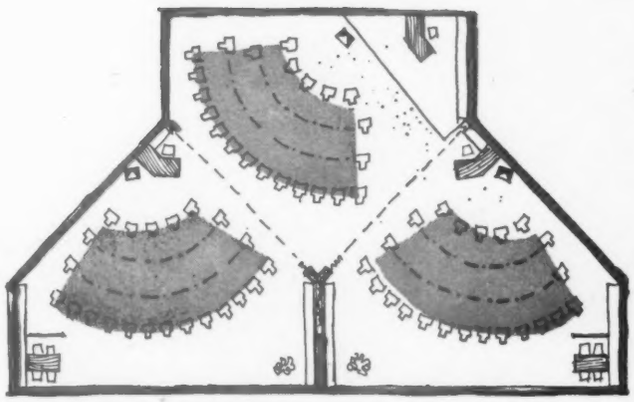
Precisely the same space, when subdivided in the manner of the second plan (*below right*) provides two large halls plus "private" space at the base for individual study, reading, or small-group seminars or discussions.

In a TV situation (the underlying object of the design) three receivers easily handle 120 students, yet a single teacher has visual control of all present. Moreover, the teacher—particularly if he or she is not directly responsible for the presentation being shown on camera—could move about the three areas.

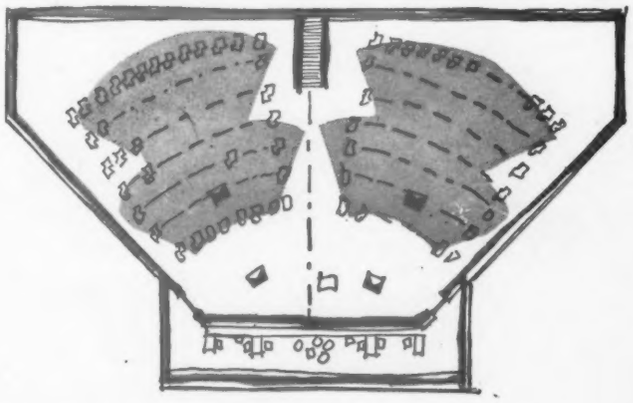
The workability and flexibility of two three-room areas combined in a single structure becomes apparent when one examines the two plans at the right. Imagine the space between the two as a corridor accessible from either end. The divider in the center of the upper plan becomes an entry to the topmost classroom. This example, plus the more complex arrangement on the next page, demonstrates the extreme adaptability of the "pentagon"—which actually seems to improve in potential as the number of classroom areas increases.

It is important to remember, however, that Chapman and EFL are not suggesting here that a curriculum be built to accommodate their suggested spaces. They point out: "In the design of a school, its spaces and its facilities must permit and support the educational function. Architecture and structure are properly left to the architect. It is our hope that . . . those primarily responsible for the structure and the school plant . . . will clearly formulate their own educational plan for the architect to translate into the specific blueprint of the school of tomorrow."

continued



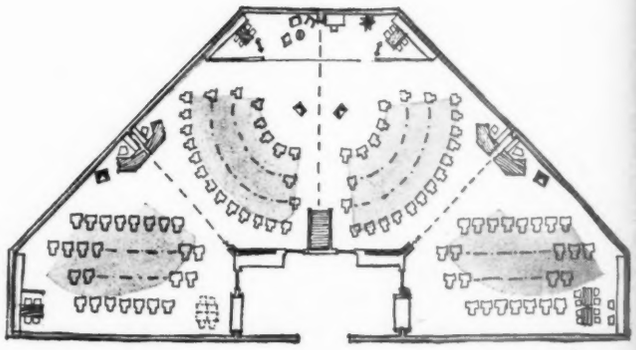
arranged for large-group television class



two large-group lecture spaces

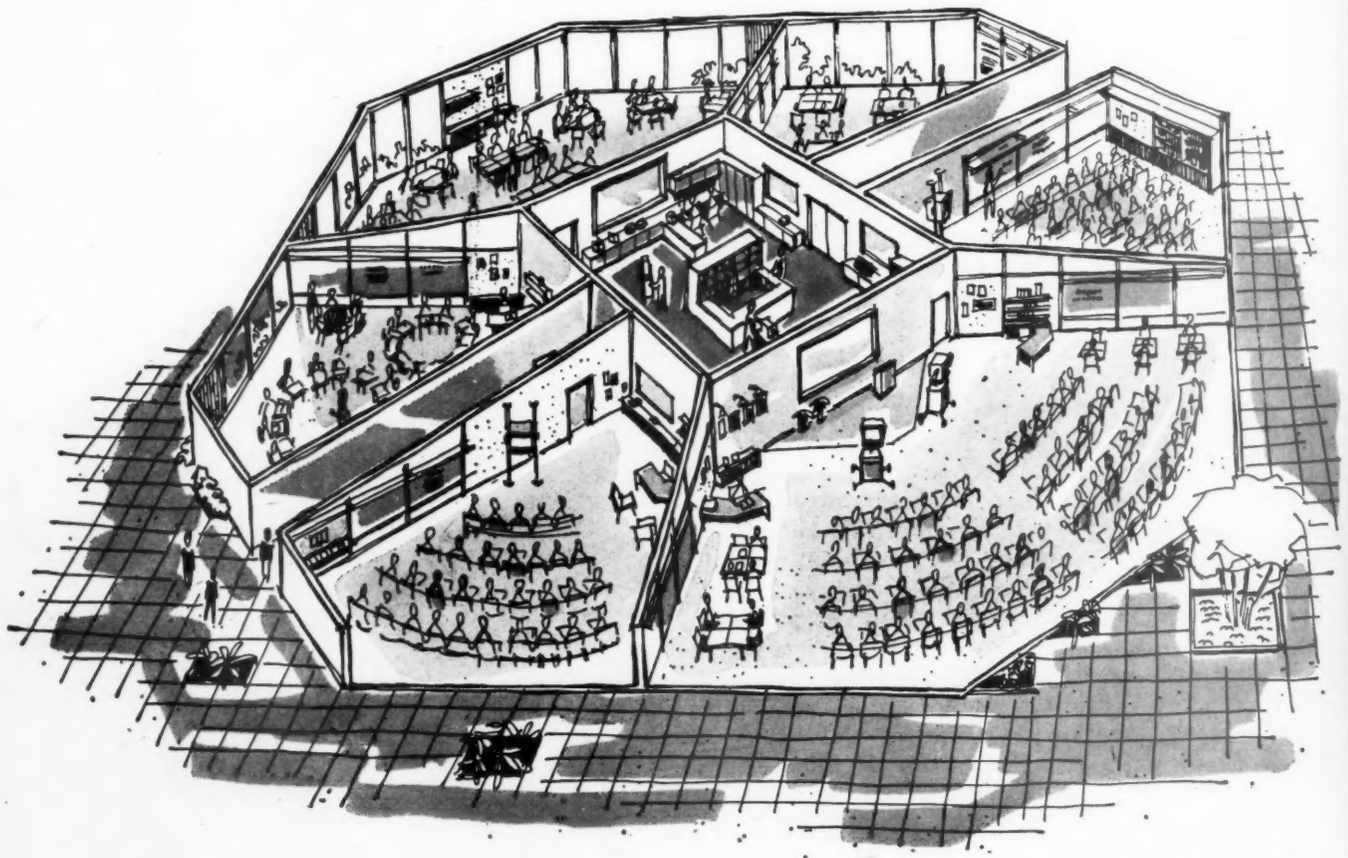
For the 100-200 group

■ All of the advantages of the individual and combined space groupings shown on the previous pages are realized—and even extended—when the rooms are clustered around a central audio-visual and resources core, or even a library. This nine-room structure can handle more than 200 pupils and might be a complete school in itself. Moreover, it could be a wing of a large school or be a "little school" in the growing school-within-a-school movement. Worth noting is the potential for rear-screen projection provided by the central space and the sensible traffic pattern that the cluster provides. The possible combinations of rooms are numerous. With the double rooms divided by movable partitions, eight separate classrooms are provided. By taking partitions down (*see sketch at right*) as many as four of the classrooms can be combined into one single lecture area. Or, three could be combined while one of the end ones remained a separate room. Moreover, it is even possible to conceive of removing all walls from the complex, leaving one huge hexagonal room around a central audio-visual core. **End**



These four classrooms can be combined for one large-group space for TV teaching. Note that the focal point is a relatively large stage or platform which is shared by two of the three spaces. The swinging partitions on this platform provide additional flexibility.

This arrangement provides six classrooms, two of which are double-size. Rear projection on a large screen is possible in the larger rooms. This complex could form one large hexagonal classroom.



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6545-1

Parent-run elementary cafeterias

In Millcreek Township, Erie, Pa., the PTA has operated elementary school cafeterias for more than a quarter-century. Here's how it has been able to do it—and why the school board favors the idea.

By WILLIAM SIMONSEN,
School board secretary, Millcreek Township, Pa.

■ ■ ■ Since 1934, elementary school youngsters in our district have been eating their lunches in cafeterias run exclusively by the PTA. The parents' group handles all matters of personnel, food preparation, food service, money collection—everything, in fact, that has to do with our elementary school lunch program.

The second vice-president of the PTA is chairman of the entire elementary cafeteria program. She is responsible for hiring all cafeteria personnel including managers for each building. These people, who are not necessarily PTA members —though they may be—are paid for their services. The Millcreek elementary cafeterias are now staffed by some 40 people who work in schools ranging from six to 19 rooms.

The cafeteria chairman acts as liaison officer between each cafeteria manager and the executive board of the PTA. Most day-to-day problems—hiring, firing, working conditions—are settled in private meetings between the chairman and the manager concerned.

Once each month an informal cafeteria management association meets for the mutual discussion of problems, exchange of recipes and menus, etc. Present at these meetings are the cafeteria chairman, each elementary cafeteria manager, the manager of the three high school cafeterias in the district—these are not run by the PTA—and myself.

In Pennsylvania, the school lunch program must—by law—be under the school district's supervision. As a result, all monthly reports are processed through my office. The bookkeeper for the district's three secondary cafeterias—operated and managed by the school board—consolidates these reports and sends them in to the state department of education.

All surplus food under the national school lunch program is handled by the school district with pick-up and delivery provided by our maintenance department. Frozen foods are kept in storage and delivered to the various schools, as needed, once a week. The district absorbs the costs of frozen storage and makes no charge to the cafeterias for the delivery service.

How costs are met

These two free services comprise the only assistance given by the Millcreek district to its elementary cafeterias. In all the years that the PTA has operated the lunch program, we have never been required to step in with financial help.

However, since the cafeterias are non-profit operations and costs to the school children are kept to an absolute minimum, it sometimes has proved difficult to replace worn out equipment with proceeds from

lunch income alone. At such times in the past, the PTA itself has contributed funds to help the cafeterias purchase the equipment they needed to maintain operation.

Present volume

How did parents get involved in the management of our elementary cafeterias in the first place? It all began 26 years ago when the PTA sparked the idea of providing our school youngsters with hot soup at lunch time. The parents remained active in the program—which has grown in the intervening years—until today, 2,889 pupils in our eight elementary schools receive the benefits of low-cost hot lunches.

Of the total elementary enrollment, an average of 55% buy Type A lunches which means that some 1,600 children are served daily in the eight cafeterias. This is 10% greater than the average percentage of such lunches purchased in the cafeterias of our two junior high schools and the high school.

Why we like it

Our school board realizes that running our elementary cafeterias this way is a rather cumbersome arrangement. Some economies would probably result if all 11 school cafeterias were supervised by one person. In addition, the yearly change of officers in the PTA has created problems at times.

But these are minor drawbacks, far outweighed by the more effective school-community relations resulting from PTA involvement. Millcreek parents have, to a degree, become school administrators. Result: a greater awareness of—and sympathy toward—the problems we face every day in the management of our schools.

One additional plus factor: through participation in the lunch program, parents are taking an active part in the formal training of their children. While the feeding of students is not directly educational, it has social and health values that are important to them—and parents feel they are contributing directly to these values. In Millcreek Township, we are convinced that this cordial relationship between the school board and our district's parents is largely due to the PTA operation of our elementary school lunch program. **End**

FOOD CLINIC

Richard Flambert answers your feeding questions

QUESTION: "Our district has been considering the use of plastic plates in our cafeteria program because of the breakage problem with ordinary plates. The question has been raised as to whether these plates can be gotten as clean as ordinary ones and also whether they are generally as good as china. Could you give us your opinion on the use of plastic plates in school lunch service?"

■ This is one of the most frequent questions we are asked when designing school cafeteria food service areas. It is difficult to give a completely satisfactory answer, as both plastic and china have their uses in the school lunch program.

Because of the light weight of plastic, and because of the plastic manufacturers' success in developing compartmented trays, we generally recommend plastic trays and dishes for elementary schools. There are several manufacturers who are producing excellently designed plates and trays in attractive colors.

However, when a student enters junior high school we feel that part of the educational process includes the graciousness and experience of eating out, which we feel is best done through the use of china. Few homes and fewer food service establishments use plastic for dinnerware. There is no question in our minds but that the use of a high grade china has an educational effect in the dining room for the average boy or girl. We use the term high grade because a cost study which we made regarding the relative original cost for breakage, etc., of china revealed that the most expensive in original cost was actually the cheapest. There is a choice of many patterns.

When plastic dishes first came into use there was some difficulty in sanitizing them properly, principally because the plastic could not be put through a dishwashing machine at 180 or 190 degrees without their cracking or warping. This has been corrected, and some of the leading plastic manufacturers are now producing plates and trays that will take extremely high heat. The continued use of knives, forks and spoons does scratch plastic; however, after the plastic is soaked in chemically treated water the scratches and stains disappear. Eventually, of course, plastic ware requires replacement.

The initial cost of a good grade of plastic is about that of an equal grade of china. The high breakage of china is not caused by the composition of china itself, but by carelessness and lack of proper supervision. Many school districts have practically no breakage. When employees are properly instructed, the bussing, scraping and sanitizing of dishes should present no problem to the handler. Again, the higher the quality of china purchased, the less chance of breakage.

To summarize this answer, I might say that our recommendations are for plastic in elementary, and china for secondary schools and colleges. In either case it would be well to consult the plastic or china supplier as well as the dealer in detergents and the manufacturer of the dishwashing machine to arrive at the most satisfactory method of economical handling of both plastic and china.

About the author. Richard Flambert is a partner in the firm of Flambert and Flambert, San Francisco, St. Louis, Omaha and Chicago, food service consultants and engineers specializing in schools and institutions. He is president of the International Society of Food Service Consultants.

Lay readers

continued from page 43

use of lay readers did not relieve them of their normal work loads. What it did do was provide them with an opportunity to add to the learning experience of their pupils in class, when their after-hours paper-grading chores were taken over by readers. Teachers were able to make an added effort, over and above the regular program of instruction. The employment of lay readers made this enriched program possible.

WALKER: Most important, though, the students get more actual writing practice than they would under a conventional program.

Q. How many written assignments did your students submit during the year?

WALKER: I think it averaged out to about eight essays in those classes being assisted by lay readers during the first year.

This was somewhat less than we had hoped to see, but it was more than the number of written exercises we used to assign. We planned on 12 papers from each student during the first year of the program but fell short of the goal because we got off to a late start. Since we did not keep to the pace we had set for ourselves, we've modified our goals somewhat in our second year.

Q. In the light of your experience with the pilot study, do you think your lay reader program could be used in other subject areas?

WALKER: That would depend upon the subject you have in mind. I don't think mathematics, for example, is suited to this kind of approach—but social studies classes might benefit a great deal from it.

Q. What has student reaction been to the use of lay readers?

KIRSHMAN: In the past year we have heard nothing from pupils to indicate resentment toward work graded by non-teachers. They have, in fact, come to know these people personally through conferences and class meetings. Our students understand that the lay reader program, with its additional writing exercises, is designed to improve skills in English composition. **End**

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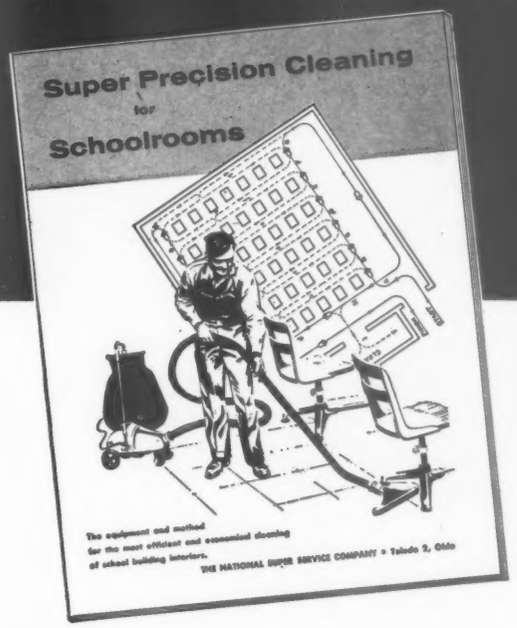

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Homemade science kits: low-cost

Here's how one district improved elementary science instruction—at very little cost—by getting the community to pitch in and help.

■ ■ ■ We have been able to meet the demand for more science instruction in our Cheyenne Mountain elementary schools—despite a limited budget—through the use of homemade science kits. Simple and practical, these low-cost kits have improved instruction in two ways:

1. Our students now participate to a much greater degree in simple science experiments.

2. As a result, their interest in science is stimulated early enough to help them choose their high school studies wisely later on.

What our kits contain

If we wished to demonstrate the effects of gravity and friction on moving bodies, we would assemble a kit consisting of a few simple "machines." The necessary items would include: pullies (from old window casings); a yardstick (from a local lumber yard); weights (50¢ worth of fishing sinkers); a spring balance (science supply house, $1.35); string (from home); a three-foot board (lumber yard scrap); a roller skate or wheeled toy (from home); a movie reel (camera shop, 75¢). Cost for these materials: from $2.60 to $4.60, depending upon whether or not the pullies have to be bought. We now have all the materials we would need to conduct a lesson and can design an appropriate "tote box" to hold them.

Why do we favor homemade kits over many similar commercial products available to the elementary

OTHER KITS THAT YOU CAN MAKE YOURSELF

ELECTRICITY KIT

ITEM	SOURCE	COST
Hook-up wire	Radio shop or telephone co.	NC
Magnet	Power company	NC
Glass jar	Home cellar	NC
Metal strips	Furnace shop	NC
Dry cells	Hardware store	$1.60
Copper metal	Power company	NC
Copper sulphate	Farm supply store	$ .25
Lead and zinc	Gas station's old car battery	NC
Small motor	Junk yard or electric shop	NC
	Approximate cost	**$1.85**

SOUND KIT

Tuning fork	Science supply house	$1.60
Steel wire	Farm supply	NC
Tin cans	Home	NC
String	Home	NC
Small bottles	Drug store	NC
Test tubes	Science supply house	$ .80
Small pie pan	Frozen food meal (home)	NC
Dowel rod	Lumber yard	$ .10
Steel rod	Junk yard or welding shop	NC
Sound power phone	Government surplus center	$2.50 (or less)
Old inner tube	Gas station	NC
	Approximate cost	**$5.00 (or less)**

WATER KIT

Filter paper	Local dairy	NC
Water softener	Soft ice cream dealer	NC
Vinegar bottle	Home	NC
Quart fruit jar	Home cellar	NC
Fine gravel	Gravel pit	NC
Metal strips	Scrap bin, sheet metal shop	NC
Lumber scraps	Lumber yard	NC
Thermometer	Drug store	$1.50
Salt crystals	Highway garage	NC
Coffee can	Home	NC
Frozen juice can	Home	NC
Liquid soap	Grocery store	$ .39
Eye dropper	Drug store	$ .10
	Approximate cost	**$2.00**

teaching aids

By RICHARD G. TELFER

Director of Instruction, Cheyenne Mountain Schools, Colorado Springs, Colo.

science teacher? Cost is a major consideration. With homemade kits, expenses are kept to the barest minimum, since most of the materials—and even the tote boxes themselves—are contributed by people in our community.

Another reason: the commercial kits are not so well suited to our classroom needs. We teach science on a unit-by-unit basis but most of the kits on the market today are not flexible enough for this kind of presentation. By designing our own kits, we can make them fit our needs exactly.

How you can do it

Your success with a "do-it-yourself" project such as ours, however, hinges on the amount of cooperation you can stir up among interested people within and outside the schools. Here are some guide lines to help you get started:

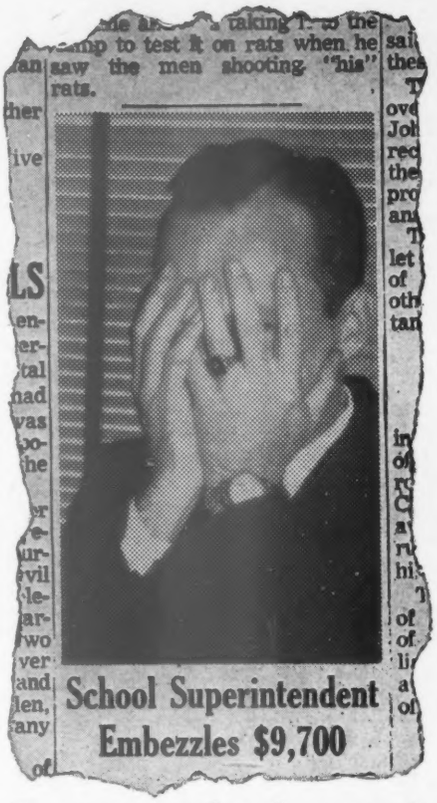
- Build your science kits around those teaching units which can be helped the most with simple equipment and supplies.
- Visit the scrap pile of your local lumber yard for material with which to build kits or tote boxes. (Choose only lightweight material for this purpose.)
- Describe your project to your high school shop teacher or to a father who owns woodworking tools. But remember that these people must know exactly what you want before they can be of much help.
- Design a tote box for each particular unit (electricity, work and energy, etc.), since size and shape would vary with the materials included.
- Send letters home to parents describing the project and soliciting donations of items needed for each kit.
- Contact local businessmen for discarded materials that you can use, but be certain you know what you are after. List specifically the items you seek.
- Don't forget to obtain sufficient amounts of those items which can only be used once in demonstrations (filter paper, for example).

Kit suggestions

For your guidance in getting your own do-it-yourself project underway, study our examples of the homemade science kits which proved most useful in our elementary classes (*see box, opposite*). Sources of supply are suggested for each item, together with an estimate of its cost—if any.

These are but a few of the kits that can be devised. The kind and number you can produce yourself depends largely on availability of community resources and the willingness of your staff to spend the necessary time to collect needed materials.

- You will find that the classroom value of these science kits is considerable. But beyond that, you'll discover that this kind of intimate school-community cooperation is precisely what you need to build sound public relations with your district's citizens. **End**



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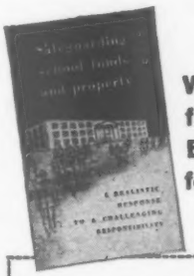

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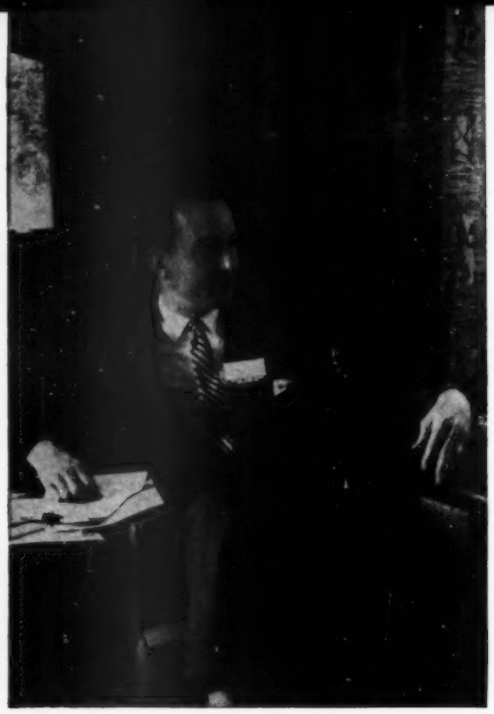

"I don't think the general public recognizes the true role of the school board member."

EPSTEIN

School board-superintendent conflict

continued from page 39

EPSTEIN: Let me add to that. One reason we are now able to finish our board meetings before one or two o'clock in the morning is that we're not talking about many of the things that are really not board matters. Any school board member will know what I mean.

Q. Isn't this a form of abdication, though? Isn't the board delegating many things it really shouldn't delegate?

EPSTEIN: Some members of the public may say that, but on our board we feel that we should stick to policy making. We think it's our duty and we don't think it makes sense to take away the authority of our administrators. We're paying them to do a job. From a practical point of view, I don't see why the board should do the work if it's paying for competent personnel.

Q. If you follow that line to its logical conclusion, doesn't it mean that a board must be sure that it has a very good administrator?

EPSTEIN: Definitely. If written school board policies are to mean anything, we must have complete confidence in our administrators and give them the right to apply these policies as they see fit.

Q In your joint committee report, Mrs. Radke, you said that the second reason for having written policies is that "they bring understanding." What kind of understanding do you mean?

RADKE: We were talking about understanding between the community, the school board, and the staff. For example, let's say your community has a citizen's advisory group. The board's attitude toward that advisory group should be stated in its policies. That's one aspect. Another example might be the school board's policy as to community use of school buildings. When that kind of policy is written, it eliminates misunderstanding and accusations of unfair treatment.

EPSTEIN: I'd carry it a bit further. We intend to make our policies available to the general public. I don't think the general public recognizes the true role of the school board member. Many citizens think we should get into administrative matters. Written policies can help us to educate the public as to what our responsibility really is and what the administrator's responsibility really is.

Q. The committee's third point on "why written policies?" is "they bring good will." Isn't that the same as the point we've just discussed?

RADKE: No, the points are different, although as I'm sure you have noticed, all five points overlap. Here the Joint Committee is saying that written policies are tangible evidence that the school board wants to be consistent and fair in its treatment of its employees and in its relationships with the community. Take this as an example: personnel policies cover such items as compensation, sick leave provisions, retirement plans and provisions for professional growth. Putting such policies in writing not only brings about "understanding" as we mentioned in point two but also assures employees that their interests are being safeguarded and that each will be treated fairly. This helps create "good will."

EPSTEIN: I can give you a good example of the need for that kind of written policy. Our board recently reviewed vacation policy and found that we didn't necessarily agree with the policy as it existed, since it differentiated in treatment between administrative personnel and all other 12-month employees. We don't think there should be a difference. With the exception of the superintendent, we feel our vacation policy should be identical all the way down the line. In our review, we rewrote the policy.

Q. Your fourth point says, "written policies provide direction." What did you have in mind there?

RADKE: We were really thinking about how written policies assist in evaluation and re-evaluation of school operations. Several examples come to mind. A good one would be policy toward accepting non-resident students in school districts. Conditions will change from year to year based on the available school room space. The same would be true of curriculum objectives—they change as the science of education changes.

Q. The fifth point is that written policies provide for control and efficiency. Were you referring to the line of demarcation between the board and the administration?

RADKE: That's about right. Written policies establish guide lines, fix responsibility, and clarify working relationships, and of course they are

not limited just to the board and the administration. Everyone on the staff can work more effectively and efficiently when he knows what is expected of him.

Q When you come right down to it, what's the difference between a policy and a rule? The person who makes it?

RADKE: Our joint committee spent a good bit of time defining these terms. There's a fine line between them. I'm going to stick to the definition we give in our report: "Policies are principles adopted by the school board to chart a course of action. They tell what is wanted and they may include *why* and *how much*. They should be broad." Here's what we say about rules and regulations: "They are the detailed directions used to put policy into practice. They give specific directions telling *how, by whom, where,* and *when* things have to be done."

Q. Does the school board ever make a rule or is it limited to policy?

RADKE: While rule making is usually the superintendent's job there are occasions when it is advisable for the board also to make the rules and even times when other interested persons are asked to assist. In my own community we recently asked representatives of various civic groups to help draw up the policies and rules and regulations governing the use of our new high school auditorium by the public.

Q. Should the board be expected to ratify the superintendent's rules and regulations?

RADKE: In most situations the board will be consulted by the superintendent after he has developed rules and regulations. Some boards actually vote approval of the superintendent's rules and regulations. Others do not. It's a matter of local option.

Q. It might help other school boards if we could nail this down a little tighter. For example, when you described your school philosophy earlier, Mrs. Radke, you said that it was your policy to educate children so long as they profited by attendance. That's a policy. Now what if you added to that a statement about expulsion or suspension under certain conditions, would that be a rule? Should that be in the school board's policies or in the superintendent's rules and regulations?

RADKE: Yes, that could be a rule. Let me add though that identification of this kind is not always easy. What one board views as a policy, another may view as a rule. This is because some policies are very broad, others are narrower. This fact should not be discouraging. The important thing is to have a clear statement of how the board intends to operate. The real goal is effective school operation.

Now, as to your second question about where this rule should be placed. That sounds like an easy question, but it is not! Until very recently little effort was made to distinguish between policies and rules and procedures, and all were included in the same manual. At present some boards are using separate manuals—one for their policies, the other for their rules and regulations. Other boards have continued to use one manual but have distinguished between their policies and rules by some simple device such as underlining the policy, or using different colored pages within the manual.

EPSTEIN: I'll accept the separation you have suggested, but I feel that it's critically important for the administration to find some way to advise the school board, in writing, of the rules and regulations that it makes.

We are expected, by the community, to be generally familiar with these rules. I like to see them in writing because it makes it possible to reach everyone who may be affected, including teachers, custodians, students, and parents, too. I think I can give you a more clear-cut example of the difference between a rule and a policy. Let's say the board states that the school district will transport all students who live a mile and a half or more from

"Written policies establish guide lines, fix responsibility, and clarify working relationships."

RADKE

school. That's a policy. It's an administrative matter to determine where that *mile and a half* begins and ends. That's a rule or regulation.

Q. Can we get one more good sharp example? Let's take the question of school safety. Let's say the board wants a formalized safety program in its schools. Would it simply say in its written policies, "It is the policy of the school district to take every reasonable precaution for the safety of the pupils," or would it spell out its desire for an organized program with a safety officer? Where does policy end and administrative regulation begin?

EPSTEIN: I would say it is policy to establish a safety director and to indicate the direction the program should take. It would be an administrative rule or regulation to define the specific duties of the safety director. Policy should stay in general areas. When you start to get specific, you get into administrative decisions.

RADKE: I think we tend to overemphasize this. But there's a reason for it. We're trying to make distinctions that will avoid conflict between the superintendent and the board.

Q. As a result of this joint committee project, could a school board follow a prototype that you people might create?

RADKE: I would not want to see that. I think there is real value in hammering out written school board policies tailored to each individual district. It involves the board, the staff, and the community. You end up with better understanding—you know the reasons for the various policies. Often this mutual understanding is as valuable as the written policies themselves.

EPSTEIN: I agree. It's very tempting to copy what someone else has done. But when you do that, you haven't done the thinking yourself. Writing policies forces the board and the administration to really examine themselves.

Q. Who should do the actual writing of the policy manual?

RADKE: Again, I would say that this is a local decision. Some boards have turned much of the actual work over to the administration. Others have done almost the entire job themselves.

EPSTEIN: Our board wrote the policies concerning board operating procedures. When it came to other policies—such as the business end of our schools—our superintendent did the writing and we reviewed it. Incidentally, he even wrote into the policy how to go about hiring a new superintendent!

Q *How do you begin? What's the logical starting point for writing a policy manual?*

RADKE: My own recommendation would be to begin with school philosophy and school objectives. But that isn't a "must." This is a local decision. Our joint committee has developed a topical outline for the board to use, but the board can actually start at any place it sees fit.

Q. Why do you suggest that boards don't have to start at the "beginning"?

RADKE: Here's an example. Say that a district is having a problem with married students in the high school. If it needs a policy right away, there would be no reason at all not to make it the first to be put in writing. Our outline provides the framework, but there's nothing mandatory about the order.

EPSTEIN: The important thing is to get started. In order to expedite the completion of the job, our school board hasn't worried too much about sequence. For example, we had an employees' manual which was a fairly large volume. It was for certificated and non-certificated people. In that manual we had some policies and we had some rules and regulations. We took that manual, plus all the minutes of our past board meetings, and pulled out what we had previously established as policy. Then we wrote to the Illinois School Boards Association and obtained a package of manuals from many other districts. We scanned those and made up our own outline. Next, we worked from the outline and filled in the portions we felt were most urgently needed. We jumped all around.

Q. Will the types of policies written vary, depending upon the size of the school districts involved?

RADKE: Many people have that idea. It's not so. The headings of most policy manuals should be pretty much the same—regardless of the size of the district. I can imagine that a very large city system might have more details about the general area of business procedures. It might need more details. But the basic heading "business procedures" is the same.

EPSTEIN: I'd like to go back to the point of where to start writing. I think too many school boards try to achieve perfection. They try to do the job completely at one time. We feel that it's important to get something into writing and then come back to fill in the gaps at a later date. The important thing is to cover the points that are important to you at the time.

Q *Are there any subjects that you would say are taboo in a set of written school board policies? Let's take curriculum, for example. Do you think there is a place for curriculum to be discussed in detail in written school board policies?*

EPSTEIN: Definitely. It's one of the most important things. Most boards seem to spend about 90% of their time on bonds, buildings and budgets. They don't get into curriculum and they should.

RADKE: I have studied quite a few policy manuals, and I find that curriculum is the one area that most boards do not go into. I, too, feel very strongly that they should. Perhaps they just assume that curriculum is understood. Some boards may have curriculum policy outlined in some other place. We've done that in our own district. We have what's called an "annual business report." We distribute it widely. But it's outside of the written policies.

Q. What about purchasing procedures? Should they be defined in the policy manual?

EPSTEIN: We covered it only on a general, over-all policy basis; we said that bids should be sealed. In other words, we have assured our community that purchasing is done on an impartial basis.

Q. What about writing a policy that limits the purchasing authority of the administration to a specific dollar amount?

EPSTEIN: Our policy states that written specifications and competitive bids shall be required on any equipment, services or supplies to be purchased when we anticipate they will cost $500 or more. We also have another policy authorizing payment of small bills spent without advance board approval. Of course, the board actually must approve every cent that is spent.

Q. You've both agreed that there are no taboos so far as writing a policy on curriculum and purchasing. Are there any other things that might be taboo? How about class size? Would it be proper to have a statement that said it was the policy of the district to hold the pupil-teacher ratio to 30 pupils in elementary school, or 25 in secondary school?

RADKE: There's quite a bit of experimenting going on in regard to class size. Your magazine has written about it recently. I would be against a categoric policy.

EPSTEIN: I don't think the board should state a specific number of students per classroom. It might say that classrooms should not be overcrowded or that class size should be consistent with good educational quality. But it would be dangerous to get too specific and leave the administration no flexibility.

Q. When you come right down to it, is it possible for a school board to deal with educational philosophy without encroaching on the administration?

EPSTEIN: If a board and administration are suspicious of one another, are suspicious of one another's motives, you'll never get harmony. Both parties must realize that written policies are not intended to restrict either one. Policies are a guide. As soon as people try to read into them exactly what is said, and apply exactly the words that are spelled out, the proper relationship begins to break down. I'm against this idea of drawing a fine line between the board and the administration. They are a team.

RADKE: I would not choose to draw a fine line either. The best policy manual in the world would be of little value if the board and superintendent did not work as a team and regard each other with respect.

Q Once a board has put its policies into writing, who should receive copies of the documents?

RADKE: Practice would vary depending upon the size of the school district. In a large metropolitan area, the problem of distribution would be considerably different than in a small town. You might, for example, want to have copies in each school building. You might put a copy in the public library. In the large district, too, you might want to provide an abridged copy of policy for all employees. Now in a smaller town, with a smaller manual, you might be able to offer copies to anyone who wanted them. In addition, you might find it worthwhile to give them to service clubs and PTA presidents.

EPSTEIN: I might be able to give you a different slant on that. Our policies still aren't completely written. As I told you, we are going through a review and we consider it our first goal to establish policies for the entire manual, even though they may not be 100% complete or 100% acceptable. After completing this first stage, we shall bring more people into the detailed review of each section—other administrators, teachers, citizens, and possibly even high school students. When our manual is completed, we plan to number each copy and issue it to board members, school employees, village boards in the district, PTA's of each school, parochial schools throughout the district, and possibly a few others. We also intend to announce its completion to all civic groups and advise them that loan-out copies are available through the superintendent's office. We'll solicit their comments and suggestions.

RADKE: Many boards which do distribute their policies keep a very close record of who has the manuals. Then, as changes are made, pages which will fit into a looseleaf notebook can be inserted to bring the manual up-to-date. I'll go back to what I said earlier about abridged manuals—one good reason for using them is the fact that they are a lot less expensive and they do avoid putting a big volume into the hands of people who can't use it.

Q. Does your district plan to distribute abridged manuals, Mr. Epstein?

EPSTEIN: No. We discussed the idea and we also discussed the idea of distributing certain parts of the written policies to the specific groups that are affected. For example, you could distribute policies on maintenance to your custodial staff. We think this last idea is bad because we feel custodians should be aware of the responsibilities of other people in the organization and understand the entire district—not just their own job. The same applies to all other groups.

Q How widespread is the idea of putting policies into written form, Mrs. Radke? Did your study group make any estimates?

RADKE: I can't give you any figures. We know the idea isn't limited to any geographic area of the country—and we know it's growing. It must. Tensions within districts have been increased by the consistent public demand for bolder action and improved educational opportunities. One of the best ways I know to deal with these tensions is to develop clear, written policies which are available and understandable to all persons and groups affected by decisions of a school board. **End**

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Continued from page 9

bia Acoustics and Fireproofing Co. The bulletin contains complete technical data including typical coefficients of heat transmission for walls and roofs of various types of structures.

For a free copy of this bulletin, circle number 867 on the Reader Service Card.

New light on learning. That's the title of a new folder from American-Saint Gobain Corp., which pictures and describes the creative use of modern glazing materials in school buildings. The brochure details a great variety of glass types, designs, colors, sizes and optical characteristics for school planners and architects.

For a free copy of this folder, circle number 873 on the Reader Service Card.

Science supplies for high schools. A 40-page, illustrated catalog of materials suitable for use in secondary school science courses has just been announced by Will Corp. Illustrated and described are hundreds of different types of apparatus, instruments and chemicals. Current prices are included with each of the items.

For a free copy of this catalog, circle number 864 on the Reader Service Card.

Sports calendar. A wall chart sports calendar in two colors is offered by Master Lock Co. to school administrators and executives as well as coaches and athletic directors. It corresponds to the regular school year —September, 1960, through June, 1961—and provides ample space after each date for recording future athletic events, important meetings and other school activities.

For a free copy of this calendar, circle number 870 on the Reader Service Card.

Data on fireproofing. A four-page technical bulletin from Columbia Acoustics and Fireproofing Co. describes a mechanically-applied, Underwriters Laboratories-approved fireproofing system for decks, ceilings, beams, girders and columns. It contains complete data including installation drawings, U.L. test data and ratings and typical specifications.

For a free copy of this bulletin, circle number 837 on the Reader Service Card.

PRESS RELEASES

News from the business firms serving your schools

Sign maker

If you have a need for nameplates or signs you can now do-it-yourself with a simple, compact unit manufactured by Engraving Machine Corp. Available in five different models—portable and bench type—the machine is easily operated because it is tracer-guided. Any unskilled operator simply traces the grooved master letter with the stylus provided and the engraving machine does the rest, turning out finished, engraved signs with letters ranging in size from 1/16 inch to one inch. If required, letters up to two inches high can also be reproduced. By a simple adjustment, 24 different type sizes can be reproduced from a single master letter. The letters —sunk by routing action into the plate surface—can never be removed or worn off. Machines come fully equipped with no extra accessories to buy. Standard equipment includes self-centering, workholding device, depth regulator, engraving cutters and three adjustable copy-holding slides.

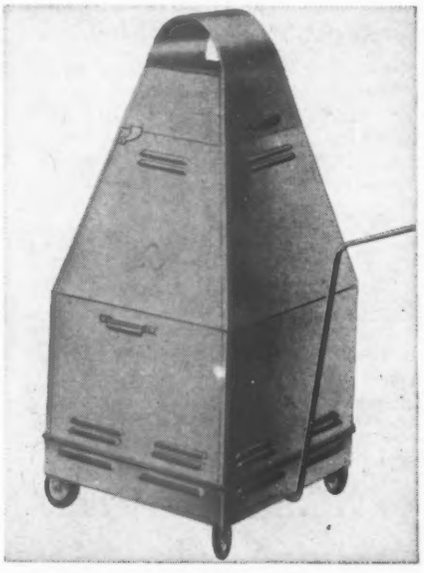
For more information, circle number 832 on the Reader Service Card.

■ ■ ■

Low-cost, portable incinerator

The combination incinerator-trash receptacle, available from Alsto Co., features wheels and a handle so that the unit can be pulled to a safe area where contents can be burned without emptying. It permits the safe burning of trash outdoors within 10 feet of buildings and can be used indoors or out as a trash receptacle as well.

The incinerator can be used to burn waste paper, packing, cartons, sweepings, food scraps, rags—burnable refuse of all kinds—to a fine ash in any weather. It minimizes smoke and smell and requires no watching.

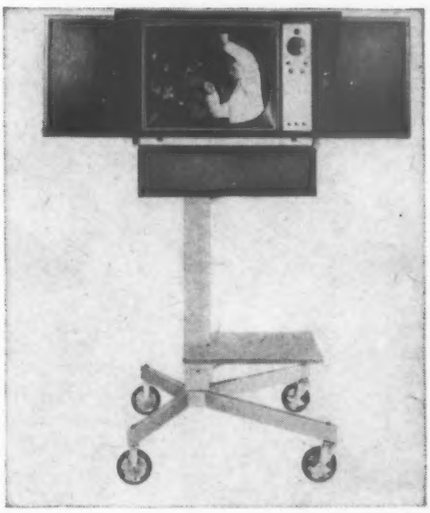


For more information, circle number 894 on the Reader Service Card.

■ ■ ■

ETV receiver on mobile stand

An educational television receiver, especially designed for classroom use, has been announced by Radio Corporation of America. The VHF-UHF set comes with an optional mobile stand and features a light shield, special fold-out, extended-range speakers, locks on speaker doors and controls. It also features a tamperproof back.



For more information, circle number 834 on the Reader Service Card.

■ ■ ■

Low-cost duplicator

A budget-priced, electric duplicator that can reproduce 120 clean copies a minute of anything typed, written, drawn or traced has been perfected by Ditto, Inc. A single duplicating master can deliver from 300-500 sharp copies, in one to five colors, on any weight paper. Paper size can range from three- by five-inches to nine- by 14-inches. A functional stand that provides storage for supplies is an optional extra.

For more information, circle number 835 on the Reader Service Card.

■ ■ ■

Single lever faucet

Two more countertop lavatories offered by the Crane Co. now feature the firm's Singl-ese trim, a one-lever faucet for both hot and cold water. They are the Westland, 20-inch by 19-inch vitreous china lavatory and the Charlotte, 20-inch by 18-inch porcelain enameled iron countertop lavatory. The company's Crown lavatory has featured the single lever faucet since 1958. The attractive, dependable faucet unit closes with pressure, thus minimizing the possibility of leaks and the single lever permits convenient control of both volume and temperature.

For more information, circle number 860 on the Reader Service Card.

■ ■ ■

Sheet file system

A wall type file for handling and storage of blueprints, mechanical drawings and other large sheet materials in drafting classes has been announced by Lewbill Industries, Inc. The unit permits the user to work with a large number of prints more efficiently and neatly since each sheet hangs flat, requiring less storage space and eliminating curl.

The steel tube frame is hinged to a plywood mounting panel and features rubber-tipped lock-clips to mount

sheets in the clamp hangers. The unit is available in two sizes, for holding sheets up to 30 inches wide and sheets up to 42 inches wide.

For more information, circle number 897 on the Reader Service Card.

■ ■ ■

Wash fountain back panel

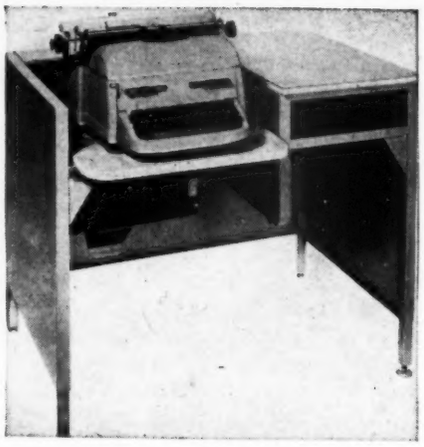
The stainless steel, foot-controlled Duo-Washfountain made by Bradley Washfountain Co., can now be ordered with a back panel which is an integral part of the unit. The panel extends the width of the bowl interior and is the height of the sprayhead.

For more information, circle number 851 on the Reader Service Card.

■ ■ ■

Commercial training desk

An improved steno training desk has been developed by the Smith Systems Manufacturing Co. for use in schools. It is a full-sized, flat-top desk for commercial training but converts instantly to a regulation typewriter desk and is large enough for electric machines. The typewriter folds easily under the desk top where it is concealed and protected when not in use. Fabricated from steel, it has a tan birch



solid plastic top. The typewriter is mounted on a ¾-inch solid plywood platform to quiet typing noise. Dimensions of the desk are 38 inches long, 26 inches wide, and 30 inches high.

For more information, circle 893 on the Reader Service Card.

■ ■ ■

Closed-circuit TV camera

A self-contained, single-unit transistorized camera designed to function at top efficiency under extreme conditions of vibration and noise has been developed by General Electric Co. for closed-circuit telecasts. The unit can be easily moved from one area to another and weighs only nine pounds. It will use virtually any standard 16mm lens and is equipped with a remote turret for mounting four lenses at one time. The camera's low-power operation—achieved through extensive use of transistors—makes ventilation unnecessary. It operates on a power input of 18 watts—compared to the 500 watts required by some conventional cameras. Extremely light sensitive, it can be used down to one foot-candle scene illumination.

For more information, circle number 833 on the Reader Service Card.

■ ■ ■

Basketball scoreboards

Three new Scoremaster electric basketball scoreboards and timers have been introduced by the M. D. Brown Co. The largest board registers progressively through 99 for each team on colored numbergrams, has four period and one time-out indicator light and translucent name panels for both home and visiting teams. It has an automatic vibrator horn which may also be operated manually and the timer registers in minutes and seconds. Each name panel accommodates names and numbers of 12 players. The foul pan-

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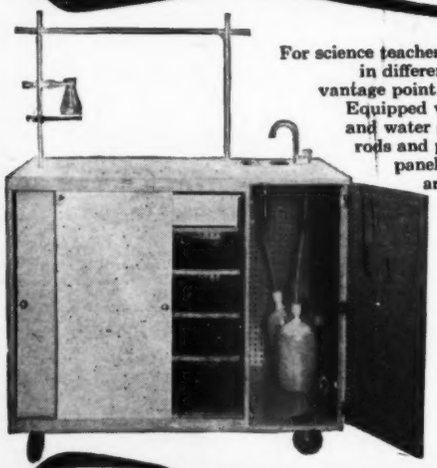

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What Do Your Teachers Really Think of Your Schools?

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See page 27 for articles available and prices

els have five red indicator lights for each player. Both scoreboard and foul panels are controlled from two separate switch panels.

For more information, please circle 899 on the Reader Service Card.

■ ■ ■

Cash collector and counter

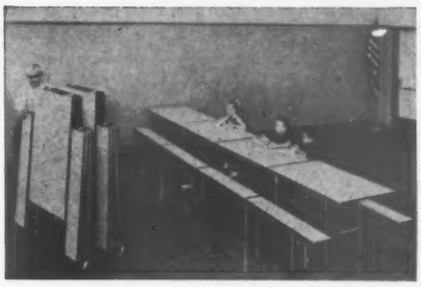
A time-saving, efficient unit for "set-priced" lunches in school cafeterias is the Counter-Cashier offered by Avenco. As customers pass along the line, they deposit the exact cost of the lunch in a recessed well on top of the unit. The cashier depresses the handle, depositing the money in a removable coin box. The unit automatically adds the amount received to the total on the built-in counter. With this device, gross receipts can be calculated instantly at any time.

For more information, circle number 876 on the Reader Service Card.

■ ■ ■

Folding table with benches

A new 16-foot-long folding table and bench set, which will seat 24 children, has been announced by Rol-Fol Table, Inc. Designed for multi-purpose rooms, it folds easily into a compact



unit only 63 inches high for rolling to a storage area. The tables have formica tops and are available with or without benches.

For more information, circle 829 on the Reader Service Card.

■ ■ ■

Lighweight dolly

An inexpensive, lightweight dolly affording "on wheels" storage or instant transport of a variety of bulky cans and containers has been introduced by Nutting Truck and Caster Co. The high-tensile, cross-braced steel frame is welded into a strong, one-piece unit and smoothly finished for easy, safe hand carrying from job to job. Four swivel casters are bolted to the frame and have two rows of ball bearings for movement in any direction. The solid rubber wheels have oil-less type bearings. The unit stands five inches high, has an inside diameter of 19-⅝ inches, an overall of 22-⅜ inches and a recommended capacity of 300 pounds.

For more information, circle number 877 on the Reader Service Card.

■ ■ ■

Snack bar counters

A catalog describing the new line of Metropolitan snack bar counters has just been announced. Available to accommodate the increasing tendency in schools, particularly at the secondary level, to provide snack counters in addition to cafeterias, the line provides both straight counters and bay type. A variety of counters can be specified. The units are provided with laminated tops in a variety of colors.

For more information, please circle 901 on the Reader Service Card.

■ ■ ■

Unified lab-classroom

A unified laboratory-classroom unit for language teaching, which can be converted quickly into a regular classroom desk, has been developed by Magnetic Recording Industries, Ltd. Fold-A-Booth offers all the advantages of acoustic separation with

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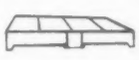

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(Circle number 736 for more information)

maximum visibility. When the flush-mounted recording equipment is not in use, a finger-tip motion of the folding lid covers it to form a desk. The new unit permits language lab and classroom work to flow naturally into one another without disrupting normal class activities.

For more information, circle number 859 on the Reader Service Card.

■ ■ ■

'Showcase' food vendor

An automatic vending machine that displays behind glass 130 separate food and drink items is now being distributed by Rowe Mfg. Co. A wide variety of cold foods and packaged drinks—sandwiches, salads, pies, cold desserts, fresh fruits, milk, fruit juices and carbonated drinks—are accommodated, each in its own individual compartment. The glass front permits the purchaser a freedom in food selection almost equal to that provided by manned cafeterias, according to the company. Fifty-two of the vendor's 130 compartments are always visible—to bring the other 78 into view, the customer touches a "transport" push-button which revolves the shelves on a chain belt. Despite the number of items included, the machine measures only 40 inches wide, 22½ inches deep and 72 inches high. A unique feature of the vendor: It delivers the identical item the customer sees and selects, not one stored behind the sample.

For more information, circle number 836 on the Reader Service Card.

■ ■ ■

Schoolroom furniture

New features of the line of schoolroom furniture manufactured by Southeastern Metals Co. include: thermal setting plastic seats and backs, safe grouping with seat legs confined within the area of desk top, chair seat and back, and rigid construction provided by cross beams penetrating tubular steel legs.

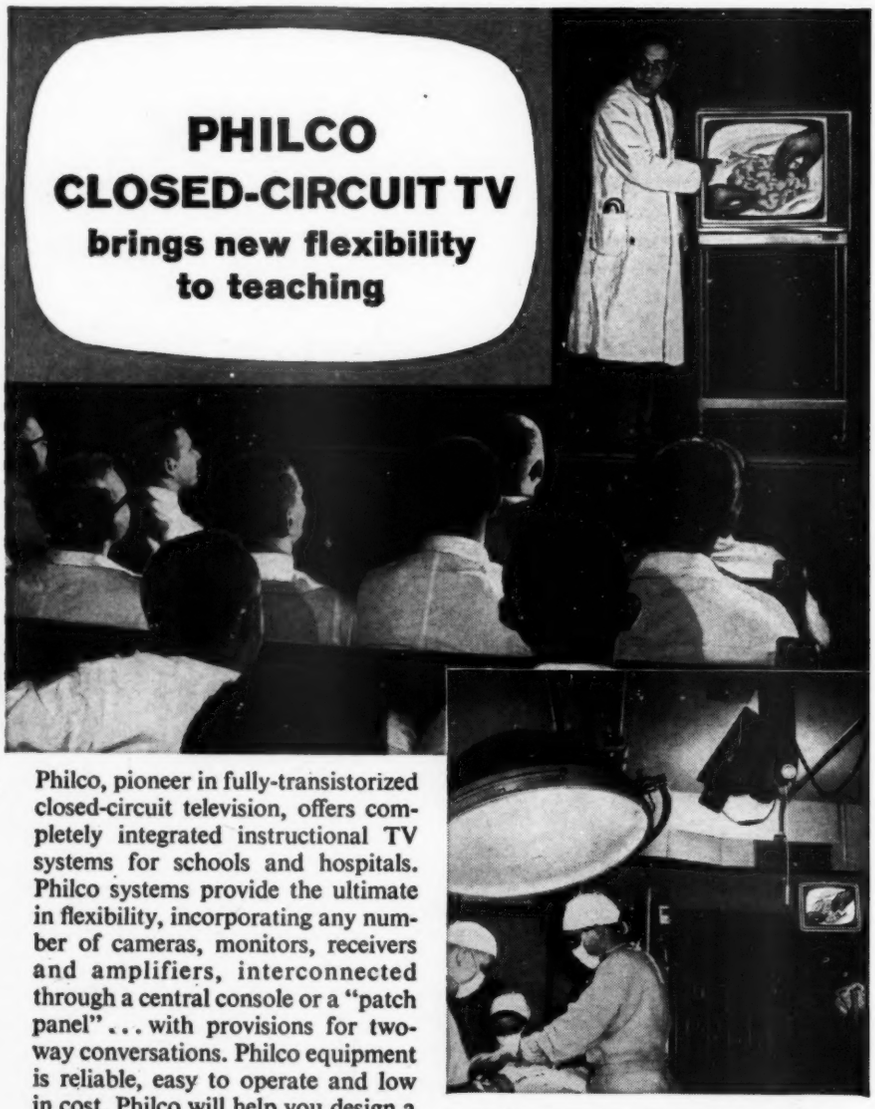
The company's Scholar Craft line offers open and lifting lid desks, chair desks—separate and in combination—lecture desks, pedestal desks, teachers' arm chairs and several all-purpose tables.

For more information, circle number 845 on the Reader Service Card.

■ ■ ■

Insulated folding partition

Space and noise problems in a crowded school can be materially helped by the new Foldoor Soundguard, manufactured by Holcomb & Hoke Mfg. Co. It is a fabric-covered folding partition, insulated inside, and equipped with complete perimeter sealing that prevents sounds from passing around the jambs and operating edges. The folding wall or door is equipped with an easy



Philco, pioneer in fully-transistorized closed-circuit television, offers completely integrated instructional TV systems for schools and hospitals. Philco systems provide the ultimate in flexibility, incorporating any number of cameras, monitors, receivers and amplifiers, interconnected through a central console or a "patch panel"... with provisions for two-way conversations. Philco equipment is reliable, easy to operate and low in cost. Philco will help you design a system to meet your requirements. Write for information and your Philco Closed-Circuit TV Planning Guide.

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The World's First Integrated Hospital Closed-Circuit TV System was recently installed by Philco at St. Christopher's Hospital for Children, Philadelphia. It links the main operating room, lecture halls, auditorium, pediatric treatment rooms, psychologic observation rooms and the radiology department. Folder describing this system will be sent upon request.

(Circle number 722 for more information)

to operate draw latch as an emergency precaution for partitions installed in school auditoriums and cafeterias.

For more information, circle number 883 on the Reader Service Card.

■ ■ ■

Rough treatment magnetic tape

A sturdy new recording tape designed to withstand the rough treatment of classrooms and language labs has been announced by Minnesota Mining and Mfg. Co. It features a new backing material called Tenzar which is tear, stretch, and moisture-resistant. The price is in the same range as standard acetate-backed tapes, but it's twice as strong. A unique end-of-reel plastic clip that clamps loose tape ends securely in place to prevent spilling comes packed with each reel.

For more information, please circle number 880 on the Reader Service Card.

■ ■ ■

Laboratory materials tester

High school science students can participate in eye-witness laboratory testing of materials with the universal tester offered by W. C. Dillon & Co. Particularly suitable to classroom use, the portable testing center permits tests in tensile, compression, transverse and shear on virtually any material. Seven capacities are available in a choice of four different upright lengths. A counterbalanced handwheel and a 20-to-one worm and gear ratio in capacities through 5,000 pounds—and 40 to one in all others—make for accurate and effortless loading. Each unit is guaranteed to be accurate within 2% of the full scale reading.

For more information, circle number 896 on the Reader Service Card.

■ ■ ■

Chimney cap

An adjustable chimney cap in four models to fit pipe diameters from three inches through eight-and-one-half inches is being distributed by Leslie Welding Co. The all-new design insures top performance on double wall metal vents, standard chimneys and any roof-terminated vent pipe. The exclusive, adjustable wide-range collar greatly reduces stock inventories since four models do the work of 12 standard chimney caps. The new Versacap protects vent systems from the entry of snow, rain, debris and birds and can be used with all types of fuels. It is available in corrosion-resistant aluminum for maintenance-free performance.

For more information, circle number 865 on the Reader Service Card.

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700	701	702	703	704	705	706	707	708	709	710	711
712	713	714	715	716	717	718	719	720	721	722	723
724	725	726	727	728	729	730	731	732	733	734	735
736	737	738	739	740	741	742	743	744	745	746	747
748	749	750	751	752	753	754	755	756	757	758	759
760	761	762	763	764	765	766	767	768	769	770	771
772	773	774	775	776	777	778	779	780	781	782	783
784	785	786	787	788	789	790	791	792	793	794	795
796	797	798	799	800	801	802	803	804	805	806	807
808	809	810	811	812	813	814	815	816	817	818	819
820	821	822	823	824	825	826	827	828	829	830	831
832	833	834	835	836	837	838	839	840	841	842	843
844	845	846	847	848	849	850	851	852	853	854	855
856	857	858	859	860	861	862	863	864	865	866	867
868	869	870	871	872	873	874	875	876	877	878	879
880	881	882	883	884	885	886	887	888	889	890	891
892	893	894	895	896	897	898	899	900	901	902	903

This card expires September 30, 1960

1 JULY **PLEASE PRINT**

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Your Position .....

Address .....

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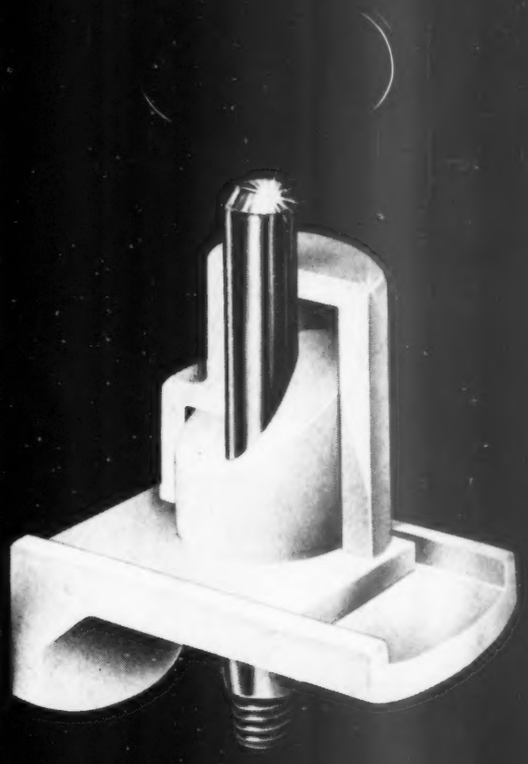

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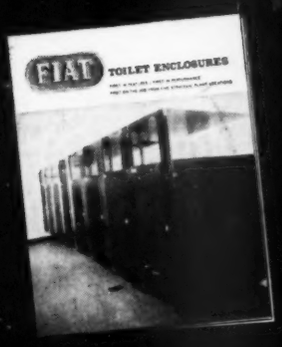

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